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OR,

MISCELLANEOUS TRACTS

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NOTE.—Plates XXXI. and XXXIII. are presented to the Society by W. M. Wylie, Esq. F.S.A.

ARCHAEOLOGIA:

OR,

MISCELLANEOUS TRACTS,

&c.

I.—*Parliamentary Proceedings in* 1628. *Communicated by* EDWARD PEACOCK, *Esq. F.S.A., Local Secretary for Lincolnshire.*

Read December 19th, 1867.

THE manuscript from which the accompanying extracts are made came into my possession by purchase about eleven years ago. I know nothing whatever of its history, except what is disclosed by a pencil note in a modern hand on the inside of the first board of the cover. This memorandum states that the book came "From Lord Somers' Library, having passed into his private Secretary's possession, & from him to his family." As this statement is unsigned, and as I have been unable to identify the hand-writing, I know not what amount of trust to place in it. The first page of the table of contents has upon it the signature of "W^m^ Milbourne." It seems about a century old.

The title of the manuscript is:

A parliam^t^ houlden att
Westm̃ Anno Caroli
Regis 3° Beginninge the xxvij^th^ [a]
day of March and ended the
xxvj^th^ June 1628.

The volume is a folio, consisting of 383 numbered leaves, and five others occu-

[a] A clerical error for xvij^th^.

pied by the title and table of contents. The hand-writing indicates that it is a contemporary record.

Of the general contents of the book much need not be said. It is simply a parliamentary journal of a kind that was very common before state papers, royal speeches, and parliamentary debates were printed. They were necessary books of reference to most persons engaged in political life, and as a consequence several volumes of such collections still exist in our public libraries. The greater part of the documents entered in this book have been printed at length or noticed in the Parliamentary History. The articles of complaint against Richard Burgess are for some reason not among the number. Their omission is perhaps owing to the manuscript from which the compilers of that useful book drew their information and the one before me having been the work of two different hands. This supposition is strengthened by the fact that there are many verbal differences between the records as printed in the Parliamentary History and the same documents as they stand in the pages of this manuscript.

It is somewhat surprising that the strange conduct of Richard Burgess has not attracted the grave attention of those historians who have written on our ecclesiastical history with a bias against the Laudian school of divines. His wild conduct shows that political and religious violence, profane handling of sacred things, and fierce personal acrimony were not confined to the Puritan party. I do not remember that any follower of Vicars, Prynne, or Lilburne is recorded to have conducted himself with more grotesque impropriety.

The only further particulars we possess are contained in the Journals of the House of Commons. On 28 April, 1628, Mr. Pym first brought Burgess's conduct under notice. He exhibited the certain articles, probably those here printed, and a petition—which we may suppose proceeded from the Puritan portion of the parish of Witney, but neither of the documents are printed in the Journals. His profaneness in catechising and preaching was exposed to the House by Mr. Pym reading aloud certain particulars concerning Mr. Burgess's exercise of those functions. In conclusion, it was determined that Burgess should "be presently sent for by the serjeant as a delinquent . . . . . to attend to the Committee for Religion." On May 9th Mr. Pym reported that the Committee of Religion had questioned Mr. Burgess as to his catechism and paraphrase, but that he absolutely refused to give them any answer; whereupon it was determined that he for this contempt should be committed to the Tower, there to remain during the pleasure of the House. The prisoner was accordingly brought to the bar by the serjeant-at-arms, and, kneeling, had the above sentence passed upon him.

On May 12th the prisoner forwarded a petition to the House of Commons. It was rejected—seemingly without being considered—because it had no signature. On the 19th another petition was presented, and on the 22nd Mr. Burgess was ordered to be released from custody, but to be enjoined to attend the Committee of the House "de die in diem" until his examination took place. Shortly after this the delinquent seems to have left London, for we find that, on June 23rd, the serjeant had orders "to bring Mr. Burgess to the House, to answer his contempt in going away without licence." From this date we lose all trace of Burgess in the Journals, until February 13th of the following year (1628-9), when we find that another petition containing four new articles was presented against him. On the 21st of the same month, Sir William Boulstred (Bulstrode) informed the House that Burgess had fled from Witney and gone to Ipswich, and that there he had given out that he had lately been in "some company of the Parliament Hell-hounds and Puritans." A warrant was at once issued for his apprehension. What was the result of this I have no means of knowing; his name does not occur again. Among the Domestic State Papers for 1628 is an unsigned warrant from the King to the Lieutenant of the Tower, bidding that official not to liberate some person, whose name has been left blank, but whose actions seem to tally with those of Richard Burgess, until he shall have had further warrant from his Majesty. John Bruce, Esq. F.S.A. the compiler of the calendar of these papers,[a] says that it has been suggested that this may refer to Burgess; and there cannot, I think, be any doubt that it does so, for no other person, at or about that time, had been committed to the Tower under similar circumstances.

Richard Burgess, M.A. was presented to the living of Witney, December 24th, 1610, by John Drury, by substitution of John Snow, M.A. He died some day between 1st of September and 29th of November, 1632. His will is on several accounts an interesting document, as tending to illustrate the household manners of the seventeenth century. It contains none of the fanaticism which we occasionally find in similar documents. It begins with the bequest, usual in those days, of the soul into the hands of God. This is followed by several legacies to the poor. The more strictly business part of the document shews that twenty pounds *per annum* was considered, in 1632, a sufficient income for a student at Oxford.

It is not unlikely that Richard Burgess was a Suffolk man. When he fled from the terrors of the Parliamentary Committee he went to Ipswich, and he mentions in his will a "great truncke" and some "siluer spoones" that "came out of Suffolke."

[a] Bruce, Cal. Stat. Pap. Dom. 1628, x. p. 142.

I possess another MS. Journal of the Parliament of 1628, similar in almost all respects to the one above described, except that it contains, at the end, certain documents that do not properly belong to a Parliamentary Journal. This volume is also a contemporary manuscript. It is written in a much better hand than the one from which the following transcripts are taken, but is on the whole not so good a text. It has however furnished one or two corrections. This latter book was once the property of Narcissus Luttrell.

Articles of Complaint agt Mr. Richard Burgesse, Vicar of Witney, in the County of Oxon.

Imprimis that he the said Mr Richard Burgesse is not only a Comon Usurer, but likewise a man of turbulent conversation and a bitter enemy to all such as Make anie shewe or pfession of Religion, and is all waies Railinge and inveigheinge agt divers of his pishioners that are religious stylinge them Puritans and Puritan knaves though they are everie way conformable to the doctrine and discipline of the Church of England.

2. Item hee hath publiquely in the Church in sundrie of his Catechismes and Sermons said that puritans (meaninge such as make anie shewe or pfession of Religion yet are conformable to the discipline of our Church) rebell agt the kinge, despise governmt, enterprise Innovacon of lawes and that they haue enterprised yt in Manie Bills in the pliamt house.

3. That Puritans are absolute Traytors, bellowes of sedition; firebrandꝭ of contencon in faction as Samsons foxes that they should bee Marked wth a blacke cole for ever wth the Marke of Malefactors, and that as the Israelites were to make warre with the Amalekitꝭ continuallie so wee must continue warr with Puritanes, for their peace standꝭ not with truthe and holines.

4. That the Puritans sitt in the seate of the scornefull, and when they are there, as Augustus Cesar taxed the whole world, soe neither kinge, People, nor Mynister can escape their Censure, That they are blacke Mouthed doggs that barke agt the kings governmt of the Church, and that hee observed in his Englishe Travells, that in every Citty, in every Towne yea almost in every pishe, there bee some doggs that will shortly overspread our Land like the froggs of Egipt, and cause yt to stincke vnles there bee psent order taken agt them.

5. That Puritans agree wth the old Catherists, and Puritans in the primitive Church, That they agree wth Anabaptistꝭ in above fowerscore pointꝭ; and wth the Brownists in all points, but in sepacon of Place, they agree as too pieces of Cloathe of the same woll, of the same colour, of the same thridd.

6. That puritans are ꝛoe members of the Church, that they are scabs and boyles of the Church; and that they are a bastard bꝛood and could not bee content to goe to Sermons themselves but drawe their Children and servants wth them, whence hee doth oft tymes charge the suertyes of

Children after Baptisme to call on their Children to heare Sermons, but wth all he addꝫ att home and [not[a]] abroad, though they seldome haue anie Semons att home, for they that goe away from their owne pishe [to heare Sermons[b]] are Straglers.

7. Item hee deliu̅ed in his Catechisme that Calvin and Beza and all the Mynisters of the reformed Churches both in ffrance and Scotland were Traytors, and he hath abused Mr. Calvin with much derision and in [c][m]any reprochfull woordꝫ.

8. Item in a Catechisme of his wch some members of this Hobꝺe House haue seene and the Petitonꝰs haue heere readie to ꝓduce, hee hath in a most scurrulous ꝓphane and blasphemous Manner expounded and applied all the 10 comandm[ts] in shewinge howe the Puritans doe breake them, to the great griefe and horror of Many that heard yt att the first, and others who haue read yt since, vnto the encouragem[t] and ill example of all ꝓphane persons and scoffers of Religion.

9. Item hee hath made a most ꝓphane scurrilous and blasphemous paraphraze in the open Church on Phillipeꝰ 2d verse of the 3d chap. wherein hee shewed that there were 6 [sorts of[d]] Pharisaicall Puritans scoffinge att sundrie preachers, and traducinge others, a copy of wch paraphrase the Petitioners haue ready to ꝓduce.

10. Item hee doth ordinarilie irreverently bury the dead, readinge the Lordꝫ prayer and the rest of his prayers wth his Hatt on his head.

11. Item the 23th of September Last past he comanded one Mr. Aylmes [e] (an auncient mynister to whome himselfe had given leave to preach) after hee had concluded his prayer, and read his text, to come forth of the pulpitt in a very scornefull mannꝰ, or els hee said hee would putt him out, and all because hee concluded not his prayer with the Lordꝫ prayer, wch hee alwaies reserved till the conclusion of his Latter prayer after his sermon, soe that hee was inforced to come downe, to the great grife, and disturbance of the ꝓpishioners who went away wthout anye Sermon att all.

Mr. Burgesse Catechisme.

Minister. Are you a Puritane Sirra tell me art thou a puritan ?

Boy. Noe.

M. Come then lett mee heare what thou canst say. What is thy name ?

B. Robert.

[a] Omitted in orig. The passage is given as follows in the Luttrell copy: But wth all hee adds not abroade, but at̃ home.

[b] MS. Lutt. [c] MS. Lutt. [d] Lutt. MS.

[e] The Lutt. MS. has Holmes. I have not much doubt that this is the correct reading. There was at that period a noted Puritan divine named Nathaniel Holmes or Homes, a sketch of whose career may be seen in Wood's *Athenæ Oxon. sub nom.* He cannot have been the person whom Mr. Burgess ejected from the pulpit, for, far from being an aged man, he was at this time but twenty-nine years of age. It is possible that it may have been his father, George Holmes, minister of Kingswood, co. Gloucester, who suffered this affront.

M. Who gaue that Name &c. As in the Comon Catechisme of the booke of common prayer. You said that yor Godfathers did promise for you, that you should keepe Godꝭ Comandmentꝭ tell me how many there bee ?

B. Tenn.

M. Wch bee they ?

B. The same wch God spake in the 20 Chap. of Exod. saying I am the Lord thy God wch brought thee out of the Land of Egipt, out of the house of bondage. Thou shalt &c.

M. Stay there, The first coñandeñt is Thou shalt haue &c. Let mee see how the Puritan keepes this coñandeñt. God saith thou shalt haue noe other Godꝭ butt me but the Puritans gett to them selves Teachers fittinge to theire owne humõrs and then they Make a God of him, And as you see the Children of Israell daunsed aboute theire goulden Calfe, soe doe they about him, although hee bee but a foole &c. Thus you see hou the Puritan breakes this coñandeñt. Well goe on What is the second coñandeñt ?

B. Thou shalt not make to thy selfe anie graven Jmage &c.

M. How doth the Puritan keepe this Coñandeñt. God saith thou shalt not make to thy selfe any Graven Image &c. Now hee doth not onlie breake this Coñandñt that makes an Image and falls down and Worshipps yt but hee that makes an Idoll of anye thinge els, Now doe you see, the Puritan makes an Idol of his owne opinion, What opinion soever hee is of hee will not bee altered from, not all the Learned men in the World can reclayme him, I never knew a Puritan in all my life alter his opinion and the Cause is, they will harken to noe Admonicon, I reade of one John of Leaden a German Heri[ti]que who when the Preacher was speakinge ag̃t the Anabaptists would all waies goe out of the Church. There are John a Leadens amongst vs, one John a Leaden to day, another on Whitsonday, two John a Leadens, who when I was speakinge ag̃t Puritans went out of the Church, and is yt possible that such John a Leadens as theis, should bee reclamed, when they will not hearken to admonition, Thus yow see how the Puritans break this Coñandeñt also. Well go on what is the 3d Coñandeñt ?

B. Thou shalt not take the name of the Lord thy God in Vayne.

M. How doth the Puritan keepe this Coñandeñt. the name of God is not only taken in Vayne, when men sweare, forsweare and blaspheme, but a man may take Godꝭ name in Vayne in his life and Conversacon, when he makes a shewe of that wh hee is not, Thus the puritan would make men beleeve that none is so holy as hee, none must goe to Heaven but the Puritan, but his holines is only in shew ; for none haue more wicked and pphane heartꝭ then they &c. Thus you see the Puritan breakꝭ this Coñandeñt also. Well go forward what is the fourth Coñandeñt ?

B. Rememb that thou keepe holy the Saboth days six dayes shalt thou Labor and doe all that thou has to doe, but the seaventh &c. in yt thou shalt doe no Manner of Woorke, thou nor thy sonne nor thy daughter, thine Oxe nor thine Asse, &c. The boy mistaking there the Coñandñt.

M. Stay there what dost thou talke of an Asse, is there an asse spoken of in that Coñandñt. If there bee an asse there yt is the Puritan, But letts see how hee keepes that Coñandñt. It is written in the first of the Actꝭ the 12 Verse That yt was from Jerusalem to Mount Ollivet a Sabbath dayes Journy, what is a Sabbath daies Journey, I shall now tell you a Paradox a thinge

you never heard of before, It is said in another place, that yt was from Jerusalem to Mount Olivet 2000 Cubitts, now shall wee knowe by this what a Sabbath daies Journey is, what is a Cubitt, how many sorts of Cubits are there, there bee fower sorts of Cubits. vizt the Comon Cubitt, the Kings Cubitt, the Cubitt of the Sanctuary, and the Geometricall Cubitt, three tymes as much. What shall we saye to this Puritan, that will ride sixteene miles on a Sabbath day to heare a Sermon, are you not ashamed to bee thus beaten wth yõr owne Roddꝭ? But go on what is the fifte Coñandm̃t?

B. Honõr thy ffather and thy Mother &c.

M. Lett vs see how the Puritan keepes this Coñandm̃t. There was a Puritan who when his ffather sent him to London to take a lease in his name hee goes and takes it in his owne name and soe cozoneth his owne ffather. I knew the man and could name him, Thus you see the Puritan is disobedient to his parentꝭ. Well goe forward, what is the sixt Coñandm̃t?

B. Thou shalt doe no Murther.

M. How doth the puritan keepe this Coñandm̃t. Though hee dares not lay violent handꝭ on the bodyes of men, yett he woundꝭ and kills the good names of Men, Hee is full of Malice, hatred, and envie, wch is Murther in the sight of God. Well what is the 7th Coñandm̃t?

B. Thou shalt not comitt adultery.

M. How doth the puritan keepe this Coñandm̃t, yt is reported there is such fornicacõn among them that is not once named amonge the Gentyles. A holy Brother lyeth wth a holy Sister, ha. ha. ha. What is the 8th Coñandm̃t?

B. Thou shalt not steale.

M. How doth the Puritan keepe this Coñandm̃t. I will tell you what Kinge James saith of them. I haue noe worse Author then Kinge James him selfe; I had rather, saith hee, meete wth highe waie Theeves, then meete a Puritan, This[a] you see the opynion of Kinge James, they are woorse then Theeves. But go on what is the 9th Coñandm̃t?

B. Thow shalt not beare false witnes agt thy neighbour.

M. How doth the Puritan keepe this Coñandm̃t. The Puritan will backbite and slander, and vppon my knowledge, I know the Puritan hath deliũed that for truth wch was never spoken nor thought. What is the 10th Coñandm̃t?

B. Thou shalt not couet, &c.

M. I could wish they were not guiltie of this comãndm̃t.

The Sermon.

Because I haue beene long absent frõ my Librarie, because you expected a Sermon in the forenoone, and I did not preach yet because a minister must be apt to teach and to speeke Scholler like and to the purpose, of anie place of Scripture and yᵗ on the sudden, I thought good by way of

[a] Thus, Lutt. MS.

paraphrase to speek of a porc̃on of Scripture, wch you shall find written in the 3d Chapter to the Phillipp. verse the 2d, Beware of Doggs, beware of evil woorkers, beware of the concision, that is of the Precisian or Puritan. In wch words I observe twoe pts first the Apostles Caveat to the Phillippians 2dly what hee would have them beware of vizt of doggs, of evil workers, of the concision, of the Precision (*sic*), of the Schismaticall Puritan, of the Puritanicall Schismaticke. Theise bee the Doggs the Apostle would haue the Phillippians to beware of, thes blacke moutched doggs y^{t} barke ag̃st the Kinge, ag̃st the Bīpps, and the Governors of the Church.

I have observed in my travell that in euerie Cittie, in euerie Towne yea allmost in eurie pishe there bee some of these doggs wch will shortely overspreed the land, like the froggs of Egipt, and cause yt to stinke vnles there bee p̃sent order taken ag̃st them. I haue hard some of these Puritanicall Preachers affirme yt euerie godlie man is a god, and euerie Christian is a Christ, wch if yt bee soe I hope that god can see noe sinn in a Puritane knaue, but I that am but a weak man can. There are noe such cheatinge cozoninge dissemblinge knaves in the whole world as theis Puritans. There bee six sorts of them, I pray you remember them, they are worth your notinge, phapps you shall never heare the like againe.

1. The ffirst is Phariseus impingens, the wilfull blinde winckinge Pharisee, this fellowe goes to sett a man in the Stocke and runs his head ag̃t the walle, and Raile[s] ag̃t the Kinge, ag̃t the Bpps and the governors of the Church, this ffellow will never bee Reclaymed, not all the Learned men in the kingdome can reclaime him, I never in all my life knew such a one to alter his opinion.

2. The second is Phariseus truncatus hee hath as yf his legge were cutt of in token of humilitie.

3. The 3d sort is Phariseus Mortarius. This weares a Hatt like a Morter, wch hee pulle over his eyes and Lookes downwarde that hee may see nothinge but the ground, and y^{t} this fellow is soe proud that nothinge must bee Lawfull in the Church but what pleaseth him, he must haue a Presbiter 24 Elders 12 Widdowes all wch must bee Maynteyned att the charge of the Pishe. Now I pray, where is there a pishe able to Mainteyne such a charge.

4. The 4th is Phariseus quid debeo facere. This goes to one of the Puritan Preachers, and asketh what hee must doe, he tells him ; he must sett vpp a Lecture[a] in such a Towne.

5. The 5th is Phariseus ex amore. This man is a Puritane because some friend in the Towne is a Puritane.

6. The 6 sort is Phariseus ex timore this fellow dares seem no otherwise for fear of displeasinge some greate Puritan by whom hee liveth, but I thanke God I am neither a Puritan for feare nor for Love, neither doe I feare anie Puritan in the kingdome.

[a] As a specimen of the errors that creep even into carefully executed manuscripts, it may be well to note that the Luttrell copy makes worse than nonsense of the above by reading *picture* for lecture. A picture was about the last thing a rigid Puritan of those days would "sett vpp." A few years after, at the beginning of the Scottish Civil War, while Montrose was yet a Covenanter, Jamestone's portrait of the provost of Aberdeen was removed from the session-house as "savouring of Popery." I. Hill Burton's *Scot Abroad*, v. ii. p. 326.

Thus have I putt out the sorte of them. I pray you remember them they are worth yor noteinge.

Phariseus impingens.
Phariseus truncatus.
Phariseus Mortarius.
Phariseus quid debeo facere.
Phariseus ex amore.
Phariseus ex timore.

Blank Warrant of Commitment.

[State Papers Dom. Charles I. 1628. v. 105. art. 100.]

Trusty and welbeloved we greet you well, whereas the Lower House of Parliament, representing the commons of this Realme, haue lately vppon iust cause, and wth very good discretion, committed to your custody whom they found to be possessed with sondrye hereticall oppinions, in matters of trew Religion fforasmuch as there are sundrye informations, of divers malicious humours and practises, (whereof the consequence may be dangerous to the state as such a pernitious spirit is not to be tollerated, in a Christian and well governed Common wealth, wherein he hath not been pticulerly examined, as we intend he shalbe. We haue thought good hereby to signifye vnto you our pleasure that you do not deliver him, wthout further warrant from vs; wch you may alledge when soever his delivery shall come in question.

[No signature or date in MS. In pencil, in a modern hand, "Prob. May 9, 1628. Mr. Burgess."]

[*In dorso*] Warrant to Mr. Lieutenant of the Tower.

Will of Richard Burges.

[From the Will Book at Doctors' Commons, A.D. 1632.]

In the name of God Amen: I Richard Burges of Witney in the Countie of Oxon Clerke, sicke in bodie but of good and perfect memory, thankes be given to Allmighty God, doe make and ordayne this my last Will and testament in forme following. ffirst I bequeath my soule into the hands of Allmighty God my ffaithful Creator and Redeemer. Secondly I wish my bodie to bee buried in the Chancell of the Church of Witney vnder the Comunion table there, in sure & certayne hope of the resurreccon. And concerning my worldly estate wherewith God hath blessed me I thus dispose of it. Imprimis I give to the benefitt of the Church of Witney Tenne shillings. Item to the poore of the parish of Witney aforesaid the some of three pounds to bee equally devyded by my ovrseers to and amongst six score of the neediest people of the said parish, to be distributed amongst them within one weeke after my decease by six pence apeece. Item I give to my eldest sonne John Burges my Ring that I vsually weare on my left hand and all my bookes of all sortes whatsoeuer, wishing him according to his discrecon to give some of the English bookes to his sister and his brothers, according as hee shall see fittest for them. Item I giue vnto him my best Truncke and a playne beaker of siluer which was his Vncle Thomas English his beaker, and three siluer spoones whereof two haue his own name and the third my Aunt Sutton gaue. Item I giue vnto my said sonne John Burges the some of ffoure score pounds to be yearly paid him for

his mayntenñce in Oxford by Twenty pounds a yeare, quarterly to be paid him. Item I giue vnto my daughter Anne Burges one hundred pounds to be paid her at her age of twenty and one yeares. Item I giue vnto her one double siluer salt, and all the houshold stuffe whatsoeuer that I formerly bought of one Edward Taunte. Item I giue vnto my foure younger sonnes Stephen, Richard, Price and Thomas the some of one hundred pounds a peece to be paid vnto them at their seuerall ages of twentye and one yeares. Item I giue vnto my sonne Stephen one siluer wine bowle. Item I giue vnto my said sonne Richard one siluer fflagon gilded and one presse that was bought of Henry King and the great Truncke y^{t} came out of Suffolke. Item I giue vnto my said sonne Price foure siluer spoones whereof three haue his owne marke on them and the ffourth shall be one of them that came out of Suffolke and also the Presse standing in the great Chamber. Item I giue vnto my said sonne Thomas three siluer spoones whereof one hath his owne marke and the other two haue his sister Margarettes marke and the long wainscott Chest in the great Chamber. Item I giue vnto my said children Anne Stephen and Richard nyne siluer spoones to be equally devyded amongst them three, and my will and desire is that if any of my said six children shall dye before hee shee or they shall accomplish his her or their age or ages or receive his her or their legacie or legacies, herein mentioned, that his her or their said legacie or legacies so dying shall bee equally devyded to and amongst the residue of my said children surviving. Item I giue to my brother Thomas Burges and to my sister Ellen the wife of John Thomas, in token of my loue twenty shillings a peece, and whereas I giue vnto my daughter Anne and to my sonnes Stephen, Richard and Price one hundred pounds apeece I doe declare hereby that within their said legacies of one hundred pounds apeece, their Vncle Thomas English his seuerall legacies to them are included vizt. Thirty seauen pounds apeece or there abouts, and my meaning and will is that if any of my debts shall fortune to be desperate or not recovered by my Executrix, that all my said children shall beare an equall loss therein and what debt or debts my Executrix cannot recouer my will is it shall be lost to my legatees and not to my Executrix. All the rest of my goods and Chattells not herein bequeathed I giue to my loueing wife Anne Burges whom I do make and ordeyne the sole executrix of this my last will and I do reuoke all former Wills by me made. Prouyded alwaies and my will is that if my said executrix shall marry after my decease that before her marriage she shall give my ouerseers herein named sufficient security to performe these my legacies. But if she marry not giuing the said security then I giue vnto her one hundred and twentie pounds for a legacie out of my estate and then I ordayne my sonnes John Burges and Richard Burges the executors of this my last will. Item I do make my louing friends Robert Yate of Haily Gait and John Clarke of Witney Clothier the Ouerseers of this my last Will giuing vnto each of them for his paynes herein taken twenty shillings a peece to buy them Rings desireing them for gods sake to take some paynes to see the pformance of this my said will. In witnes wherof I haue hereto sett my hand and seale the first day of September one thousand six hundred thirty two. RICHARD BURGES.

Read and published in the presence of vs RICHARD WYATT WALTER CLARKE.

Probate granted to Anne Burges 29 November 1632.

II.—*Notices of Recent Excavations in Rome.* *By* John Henry Parker, *Esq., Hon. M.A. Oxon.; F.S.A.*

Read June 11th, 1868.

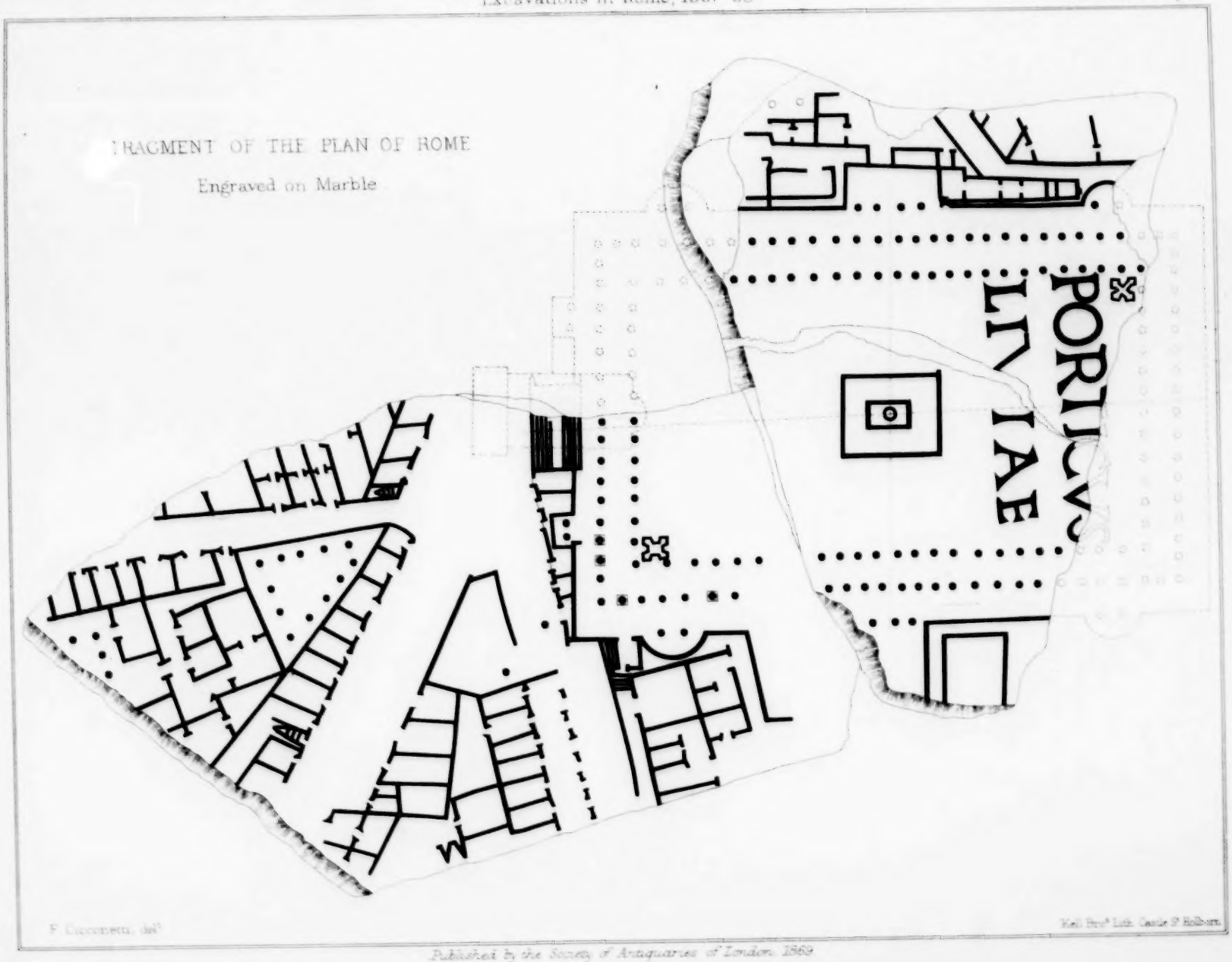
The excavations made in Rome during the winter of 1867-68 have been numerous, and their results important.

The first in period of time, and perhaps in importance also in an archæological point of view, was that made by the monks of SS. Cosmas and Damian behind their church and monastery, in what is now a courtyard, occupying the site of the *porticus* of the ancient temple out of which this church was made. In this excavation, at the depth of from twenty to thirty feet, were found several fragments of the celebrated Plan of Rome, of the third century of the Christian era, engraved on slabs of marble. The greater part of this curious plan was discovered in the sixteenth century, and placed against the walls of the staircase in the museum on the Capitol, but the exact spot on which it was found was not known, and the present discovery is therefore of high importance. The great pit in which these fragments were lately found was at the foot of a long and lofty wall faced with brick of the third century. Amongst the bricks, in lines at regular intervals, are small bronze hooks to which the slabs of marble have been hung. It is therefore now certain that the marble plan was *not* on a pavement, as had been long supposed, and asserted by many writers copying one from another. On the top of the brick wall, to which the marble plan was attached, was a cornice of marble richly carved with ornaments in the style of the third century. Many fragments of this cornice were found in the same pit with those of the plan. In the same pit still lies (now buried again) a great mass of the upper part of the Basilica of Constantine, which has fallen down from a considerable height, namely, from the top of that great building at the corner which touches this court, and almost joins on to one angle of the temple. It is probable that this large mass of concrete (with the upper part of a staircase in it and the outside ornament) fell down in the great earthquake in the fourteenth century, and that the vibration of its fall brought down the slabs of the marble plan, which were all broken by the fall. They certainly have never been trodden upon, for

the lines are as sharp as the day they were cut. Several of the tiles or bricks found in the same pit have the stamps or brick-marks upon them, all of which are of the third century.

One of the fragments (engraved in Plate I. on a reduced scale from a tracing) there found has the plan of the Porticus Liviæ, with the name incised upon it. This plan represents a large oblong platform, with a double colonnade on all sides, and steps descending from it, and some small building in the centre. The Porticus Liviæ is placed in the third *regio* of Rome in the Catalogue of the Regionaries of the fourth century; that *regio* is now called the Monti, from its hilly character. There is no level ground in the whole *regio* as usually defined, but the boundaries of the ancient *regiones* are entirely conjectural, made by modern antiquaries from the catalogue of their contents only. The third *regio* is made to terminate at its northern end with the Meta Sudans just outside of the Colosseum. In the whole *regio* so defined there is hardly a level space sufficient for the large platform and colonnade shown on the marble plan, but immediately to the north of the Meta Sudans is exactly such a platform, with many fragments of large ancient columns of granite lying about on all sides, with some of the bases remaining *in situ*, and with steps remaining at the north end. This platform is placed, by the modern antiquaries who draw out the plans of the *regiones*, in the fourth *regio*, and is always called the Temple of Venus and Rome; but the division is entirely arbitrary and of very doubtful authority, and the name is evidently misapplied. The great marble plan of Rome must have been in the Temple of Rome, now the Church of SS. Cosmas and Damian. This church is recorded to have been made out of three temples in the sixth century of the Christian era. Two of these are usually said to have been the temples of "Romulus and Remus." For a temple of Remus no ancient authority has been found. That of Romulus has been clearly shown to have been built by the Emperor Maxentius in honour of his son Romulus; this is the round temple which now forms the vestibule to the church. Signor de Rossi has published an engraving of this church,[a] as it appeared in the sixteenth century, from a contemporary drawing, which he found in the Vatican Library, showing an inscription on the cornice in which it is inscribed to Constantine. It is known that the Senate ordered all the buildings of Maxentius to be inscribed to Constantine, so that this inscription confirms the identity of this temple as that of Romulus the son of Maxentius; it may, however, have been originally dedicated to Venus, or there may have been a third temple on the site of the large square

[a] Bulletino Archæologico del Cavalieri C. de Rossi, 4to. Roma, 1867.



Published by the Society of Antiquaries of London, 1869

chamber, now the church, in which is a mosaic picture of the sixth century. The Temple of Rome is behind this, and the *porticus* (or *posticus*?) of it faced the other way towards the forum of Nerva, with the marble plan inside of it, against the back wall of this *porticus* or *posticus*. The building now in the centre of the platform and colonnade does not agree in plan with the one engraved; but the actual structure is of the time of Maxentius also, therefore fifty years later than the plan, and it has probably been enlarged when rebuilt. This building is always now called the Temple of Venus and Rome, as has been said, but the name is not older than the sixteenth century, if so old.

The site agrees with the Ædes Larum, which is recorded to have been near the Meta Sudans and the Arch of Constantine, and there is no other probable site for a temple near to them. A passage in Strabo also mentions that a man standing in the Forum Romanum could see, without moving his place, the buildings of the Forum itself, of the Capitol, of the Palatine, and the Porticus Liviæ. If the Porticus stood on the platform, as described, this would be perfectly true and natural, and there is no other site to which the words apply equally well.

On the east side of this platform are the ruins of an ancient castle, nearly triangular in plan, with scarped cliffs on three sides, and having the Basilica of Constantine built up against the north side. This castle is popularly called the Castle of Evander; it may very probably be the Castra Misenatium of the Regionaries, where the sailors from Misenæ who were employed to furl and unfurl the great awning over the Colosseum were located. This castle was also in the third *regio*, and would have to be added on at the north end of it, along with the platform. No place has hitherto been found in that *regio* for either of these two important buildings, the Porticus Liviæ and the Castra Misenatium.

These interesting excavations were unfortunately suspended for want of funds in the month of October; the monks advertised for help, but it was at a time when there were no foreigners in Rome, not even the indefatigable Germans. As soon as Dr. Henzen, the head of the German Archæological Institute, returned to Rome, he offered to obtain the money that was required, but it was then too late. Baron Visconti had heard of it, and had taken possession in the name of the Pontifical Government, and nothing has been done since but to fill in the pit.[a]

The Pontifical Government has however not been idle; on the contrary, it has

[a] It is right to state that my opinion of the probability that the *Porticus Liviæ* and the *Castra Misenatium* were on these sites is not acceptable to the Roman antiquaries, who consider the divisions of the *regiones* as fully to be relied on, and that this makes my opinion absurd. The question is, on what authority do these divisions of the plan of the city rest?

been doing a good deal in the way of excavations under the direction of Baron Visconti, notwithstanding the difficulties it has had to contend with. The excavations at Ostia have been going on quietly, but have not produced any very remarkable results during the present season. In 1866—7 a good deal had been done, but during the past winter the results have been small.

In the Trastevere the excavations have also been carried on, but without any great results this season. It has been ascertained that the buildings examined last year are not so extensive as was at first supposed, and that instead of belonging to a cohort of the *Vigiles*, it was only one of the stations which are on a smaller scale. Instead of a barrack for some thousands, it was only a guard-house for a hundred or two. Still a station of the imperial guards, part of which is of the first century of the Christian era, and the other part of the third century, is not without considerable interest, especially as the fine mosaic pavement and the paintings on the walls remain, and the curious *graffiti* or scratchings on the plaster of which some account was communicated last year to the Society.[a]

The excavations of Signor Guidi, near the Thermæ of Caracalla, have also been carried on; but here again the most important and most interesting part had previously been discovered. It is a considerable house or palace of the time of the Emperor Hadrian, and it is not improbable that it may have been the private mansion of that Emperor, which is recorded to have been in that neighbourhood, though the exact site is not known. The pavement and the paintings here are remarkably similar to those in the Trastevere, and rather finer. The chapel for the Lares is nearly perfect, and not one such chapel was previously known to remain in Rome.

The most important excavations this season have been those made by the Government, under the direction of Baron Visconti, on the bank of the Tiber, in the old harbour, between the Emporium of Commerce and the river. The ruins of the Emporium show a large quadrangle, with warehouses on three sides, the fourth side open to the river. Large quantities of marble had been found in this quadrangle by Prince Torlonia, the proprietor of the land, a few years since; and as Livy records the formation of steps from the Emporium to the river, Signor Visconti naturally thought these might be found, and probably the old Marmorata, or landing-place of the marble. It was known that the Marmorata had been moved a quarter of a mile higher up the river to the site of the old Salaria, or salt wharf, which had also been moved higher up the river to make room for it. The result fully answered the expectations that had been formed; the steps were

[a] See Proc. Soc. Antiq. 2d S. iii. 493.

discovered, and the wharf, with large quantities of marble remaining upon it, buried many feet deep under the mud of the Tiber. Upwards of five hundred large blocks of marble were found, some of it rare and valuable; so that the value of the marble recovered paid for the cost of the excavations ten times over. The blocks were removed, some to a court in the Vatican, and others to the new Marmorata. The steps descending from the Marmorata are also uncovered, and are very interesting; they are not level, but sloping with a gradual ascent, to enable men to walk up with a hand-barrow to carry up the lighter articles landed at the wharf. The great blocks of marble must have been hauled up by ropes or chains and pulleys, as it would have been impossible for men to carry them up; and the tile pavement of the steps has not been at all worn by traffic of wheel-carriages, and indeed it was evidently not intended for wheels. The sides of the steps are faced with reticulated work of the first century, in a remarkably perfect state, as fresh as if just built. The steps follow a zig-zag course, to make the ascent more easy. There are two sets or pairs, each meeting at a point on the wharf, and at that point in the cliff is a square stone corbel with a large hole through it, for fastening the vessels against the quay. These holes are scarcely worn at all, so that it is evident that this quay was abandoned very soon after it was made. It replaced an older one of the time of the Republic, when the Emporium was made. It seems probable that the new quay was made at a lower level than the old one, and was found to be too low, in consequence of the sudden and violent floods to which the Tiber is subject; and it was found more convenient to make a new quay higher up the river, and on a higher level, than to dig out the old one, and be liable to repeat the same process continually. Even since the excavations were made this winter the whole has been under water, and a deposit of mud was left, but this was cleaned off again at once while it was fresh, before it had time to get hard.

Against the face of the cliff are remains of the *porticus* or arcade, which answered the double purpose of supporting the bank and of giving shade on the quay or shelter in case of a storm.

These excavations have been very well directed by Baron Visconti and Signor De Rossi. The only objection that can be found is that they have made the old work look rather *too prim;* they have replaced the tiles that were wanting on the pavement with other old tiles looking exactly the same. These tiles were brought from other places where excavations had previously been made, and are not of the same period as this quay. Some of these tiles placed here have their brick-stamps upon them a century or two later than the quay, and this, as

might have been expected, has already deceived some antiquaries who did not know the trick that had been played. I suspect that Baron Visconti amused himself by taking them in.

Some excavations have been made under the direction of Dr. Henzen, the head of the German Institute, on the site of the College of the Dioscuri, five miles from Rome, on the road to Porto. The plan of the college has been made out, and some new inscriptions have been found of very beautiful execution, and the letters as sharp as when they were cut, although the slabs are much broken. An account of them will be published in the Bulletin of the Institute by Dr. Henzen himself, and all those who are interested in Inscriptions should look out for it.

Some other discoveries have been made by accident during the present season, which in other places would be considered of importance, but in Rome pass almost without notice. In altering the level of a back street at the foot of the cliff of that part of the Quirinal Hill on which the gardens of the Barberini Palace are situated, at the back of the Via di S. Niccolo da Tolentino, on the way to the railway station, the workmen came upon a fine mosaic pavement of black and white, in the usual style of the first or second century, with partition walls and foundations of some important house or palace of that period. Only a small portion of it is in the road. It passes under the houses and gardens on each side, and could not be followed further.

In making the new fort and battery on the highest part of the Aventine, between S. Prisca and S. Sabina, several subterranean chambers of another important house of the first century were found, perhaps originally cellars only, but, as we were not able to descend into them, we could not ascertain the facts. A portion of the Wall of the Kings against the cliff near to this was also excavated by the soldiers.

On the opposite side of the Tiber, just where the ferry-boat passes at the Ripetta, in making a new road to S. Peter's, another series of chambers was found underground, also belonging to a house of the first century, and apparently an ancient street at this low level, or a subterranean passage, in the same direction as the new road.

In making another new road to the railway station on the Viminal, near the Thermæ of Diocletian, the line of an ancient street was followed for some distance, with the foundations of houses and shops, also for the most part of the first century. This is believed to have been a part of the Vicus Patricius, the fashionable street of that period.

The excavations carried on under the direction of the British Archæological

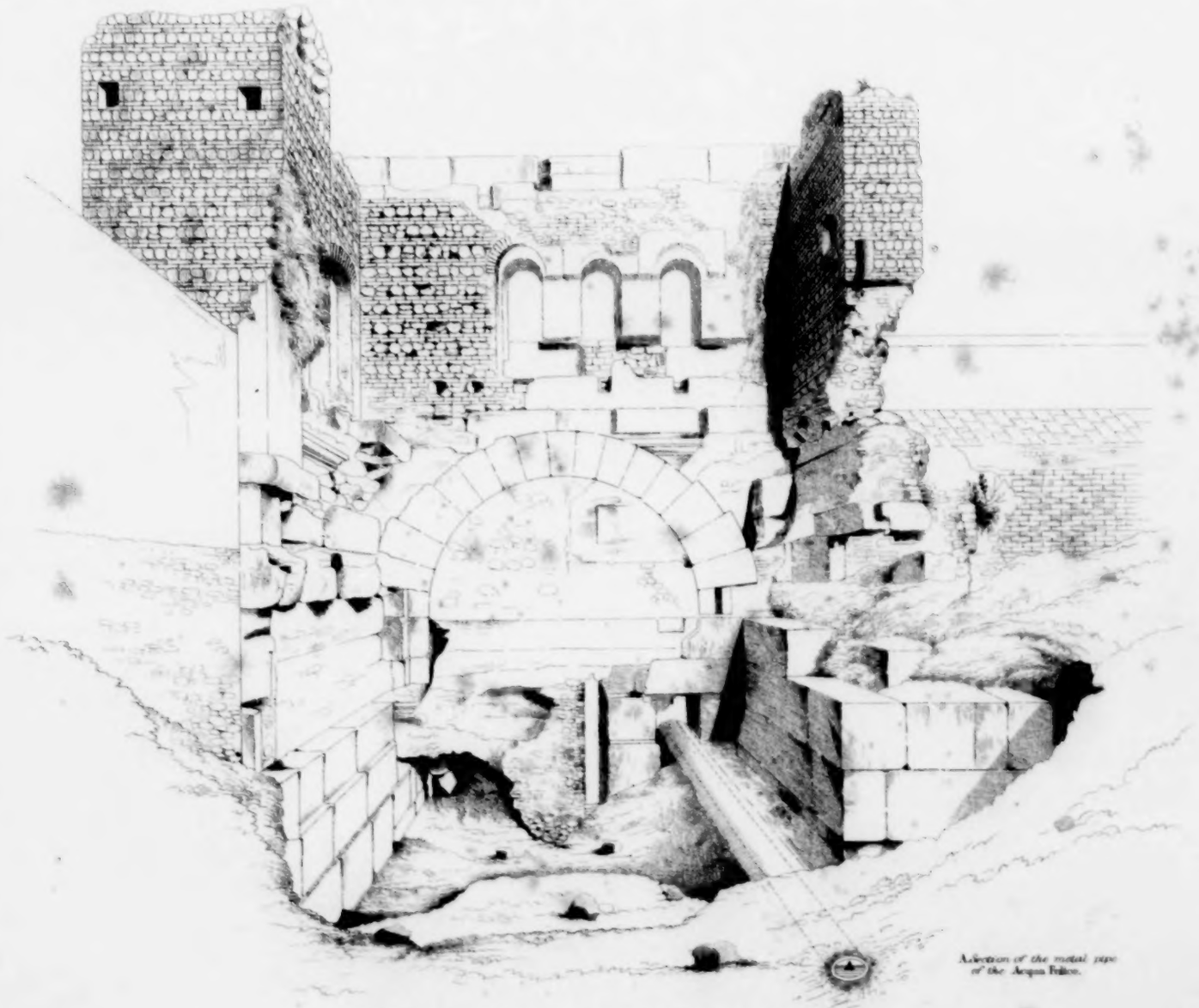
Society of Rome, although conducted quietly and without much show, have been of considerable historical importance. They have shown in several places the line of the Wall of the Kings of Rome, usually called the Wall of Servius Tullius, by uncovering parts of that wall in places where it was not generally known to exist, as in the Garden of Sallust at the north-east, and at the Porta Trigemina in the west, and in the Forum of Augustus in the centre. They have thus been enabled to trace out clearly the inner line of defence, the wall of the City proper, which is as distinct from Rome as the City of London is distinct from London. They have also been able to show that there was from a very early period, and probably from the time of the Kings, an outer line of defence corresponding to the usual wall of *enceinte* in all fortifications, only being made at a very early period it consisted of a great bank of earth, or *agger*, with a deep and wide foss on each side of it. This outer line is quite distinct from the inner line which on the eastern side of Rome is usually called the *Agger* of Servius Tullius. The probability is that the primitive fortifications, consisting chiefly of earthworks, were carried on by the three last Kings of Rome, Servius Tullius and the two Tarquins. One of the charges brought by Brutus against Tarquinius Superbus, the last of the Kings, was that he had employed the Roman people as slaves in digging instead of as soldiers in fighting. This shows that great earthworks were carried on in his time. The theory of the Germans that the *agger* of Tarquin was merely an additional thickness on the outside of the *agger* of Servius Tullius will not hold. This theory was published in the Journal of the Institute a few years since, when a portion of the inner *agger* was brought to light by the railway cuttings, and at first sight it seemed to derive support from the fact that the stone wall is in the middle of an enormous bank of earth, having about twenty feet on each side of it. A passage in Terentius Varro also appeared to bear this interpretation, that an *agger* had a wall in the middle of it; but the recent excavations of the British Society have shown that the inner bank within the wall consists of virgin earth, whereas the outer bank consists merely of rubbish thrown up against the wall and filling up the great foss on the outside of it. This outer bank is full of broken pottery, broken bricks, and other rubbish, and is entirely of loose earth never properly bound together. A house of the first century was also buried in it. This house is built up against, and into, the outer bank, and proves the situation of a foss-way on the outside of the *agger* as well as another within, for which we have the same evidence,—remains of another house of the same period.

Some excavations were made in May 1868, in the inside of the old gate at the

south-west corner of the Prætorian Camp (usually called the Porta Chiusa, or the Closed Gate, because people cannot agree about the proper name for it). These excavations have brought to light a portion of a wall, built of the large square blocks of *tufa*, usually called the Wall of the Kings; another portion, with one jamb of the gate, is of the time of the Republic. (See Plate II.) Under the gate is the *specus* or tunnel of an early aqueduct, with the conduit of the Acqua Felice made within it. The engineers of the Acqua Felice frequently made use of the old tunnels to carry their metal pipes in. The early aqueduct is probably the Anio Vetus, as that *specus* is generally near the surface of the ground, sometimes a little above, sometimes a little below, according to the levels. It is also faced with *opus reticulatum* in most places where it is visible, as by the side of the road both outside and inside of the Porta Maggiore, near the point where it passes through the wall, just below the surface of the ground or half underground, the Aqua Marcia being carried on an arcade by the side of it many feet higher. Branches of both these aqueducts were carried to the Prætorian Camp to supply it with water, but the Marcian appears to have been destroyed when the wall was built or rebuilt. A stone *specus* believed to be that of the Anio Vetus is used to build the wall of the camp upon, and is clearly visible for some distance along the foot of the north wall with the fine brick wall of Tiberius built upon it.

A little to the south of the Prætorian Camp the foundations of a *castellum aquæ*, or reservoir, of early character, with the usual triangular-shaped bricks, have also been excavated. The present city wall is built right across it. This again clearly shows that the great bank, with the reservoirs and the conduits of the aqueducts upon it, was in existence long before the wall was built. Similar remains of the aqueducts and reservoirs can be traced at short intervals nearly all along the line of the wall, sometimes inside sometimes outside, but always destroyed by the wall, which is built across the reservoirs, and often of the materials of the stone *specus* and of those of the conduits.

Two important and large reservoirs near the Porta Maggiore have been partially excavated. Each consists of several parallel chambers underground, with the *specus* running through them; it has generally been sufficient to clear out one or two of the chambers, the rest being merely repetitions. One of the reservoirs is near the temple of Minerva Medica and in the same large vineyard. Careful examinations, and descents into two other subterranean reservoirs in the same vineyard, to trace the lines of the *specus* or water-courses, have proved that the building called the Temple of Minerva Medica is a *nymphæum* of the third century. It is very likely that of Alexander Severus, and probably

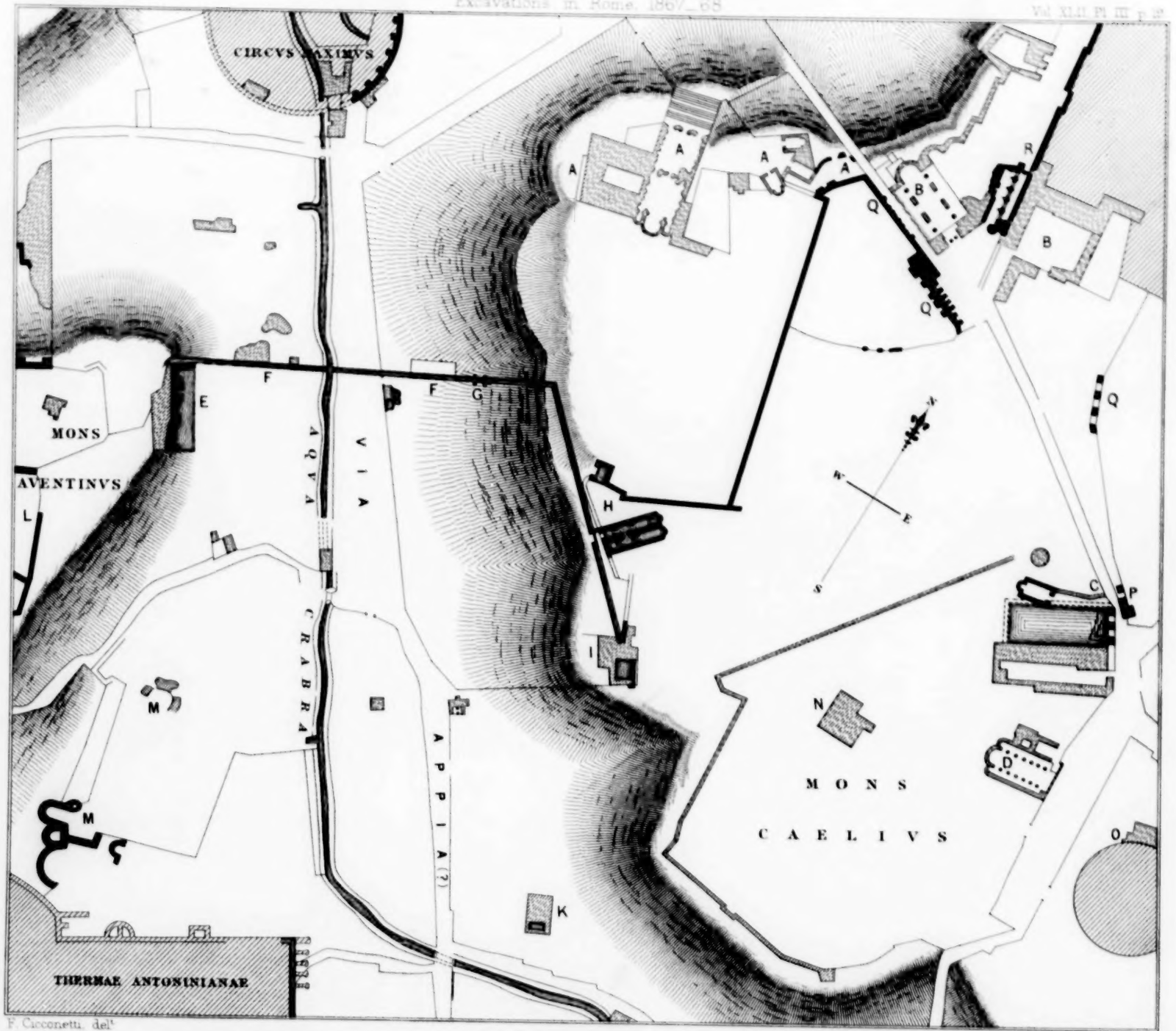


INTERIOR FACE OF THE PORTA CHIUSA.

F. Ciccognetti del.

Hall Brothers Lith. Charles St Holborn

Published by the Society of Antiquaries of London 1863.



F. Cicconetti. del.t

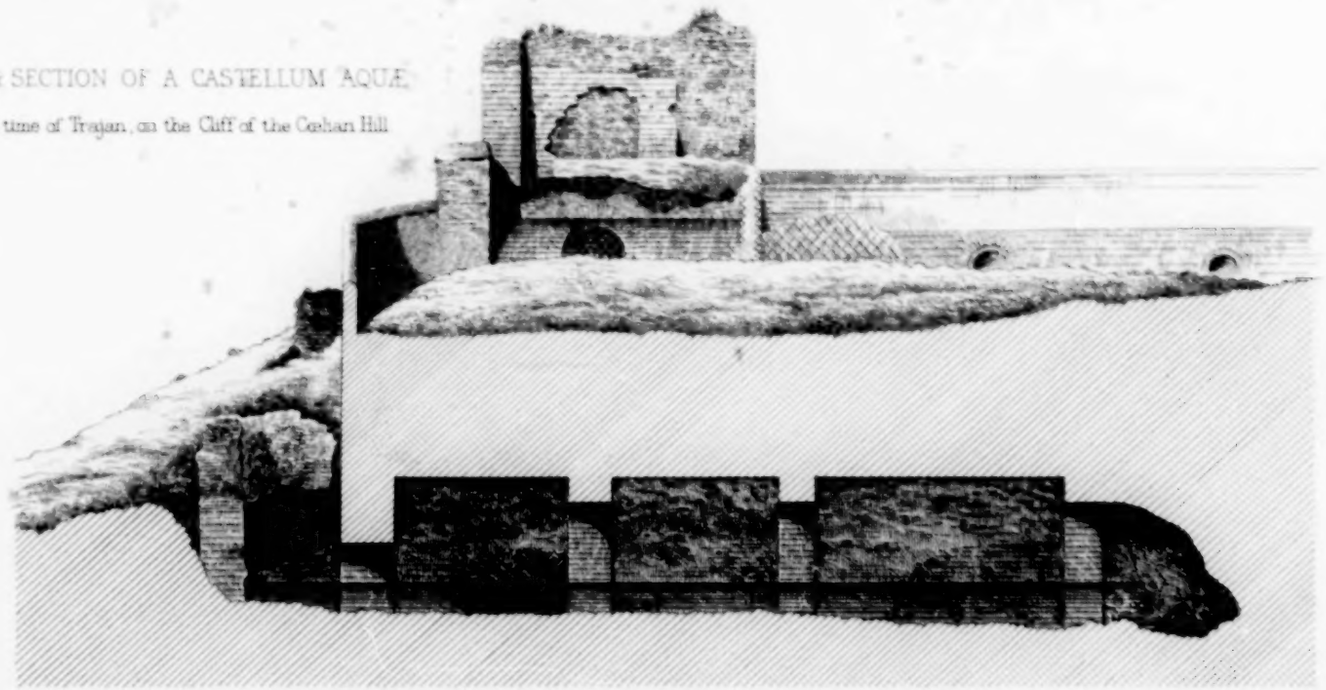
Kell Bros. Lith. Castle St. Holborn.

PLAN OF THE VALLEY BETWEEN THE CÆLIAN AND AVENTINE HILLS.

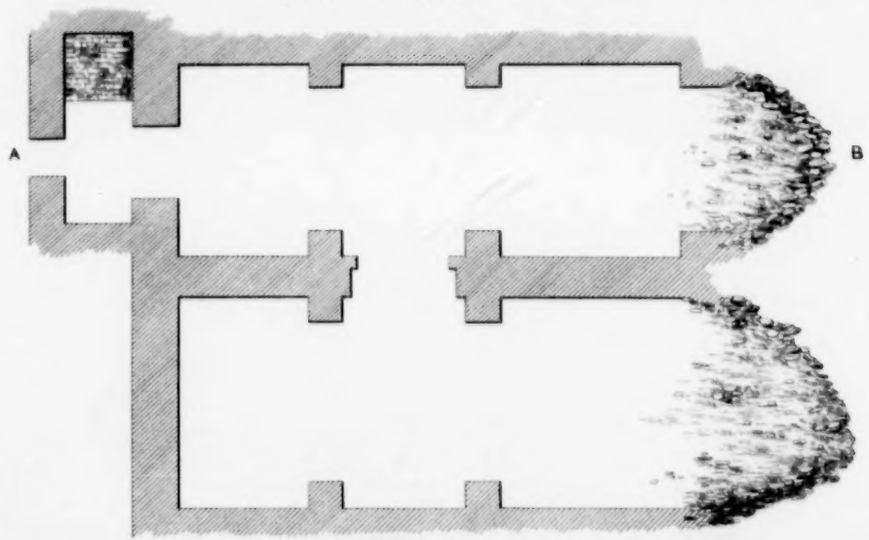
Published by the Society of Antiquaries, at Burlington House, 1869.

PLAN & SECTION OF A CASTELLUM AQUÆ

of the time of Trajan, on the Cliff of the Cœlian Hill



SECTION ON LINE A B



PLAN

F Cicconetti, del.

Published by the Society of Antiquaries of London, 1869

Nell Brot Lith Castle St Holborn

his *thermæ* were on this spot. The water to supply these *thermæ* was brought by branches from the Porta Maggiore from at least three aqueducts at different levels—that supposed to be the Anio Vetus at the level of the ground; the Marcian twenty feet above it, the arcade of which passes through the wall carrying the *specus* in a direct line to that great reservoir; a third from the Claudian, brought on a lofty arcade another twenty feet above the Marcian, and carried along the bank, afterwards incorporated with the wall, to a point nearly in a line with the Minerva Medica, whence it was carried to another reservoir, still partially existing, between that and the wall, and thence on a lofty arcade, two of the piers of which remain, and round the *nymphæum* above the arches to supply the fountains.

The other reservoir lately excavated is between the Porta Maggiore and the Sessorium, in a direct line from the point where the aqueduct of Claudius enters Rome. This reservoir has been very extensive, or there have been again two in the same vineyard only a few yards apart. The old subterranean *specus* runs from the underground chambers of this reservoir, while the upper chambers, fifty feet higher, belonged to the Anio Novus. In this same vineyard, through which the arches of Nero pass, is another curious feature—a cascade *specus* to carry off the surplus water in times of flood from that lofty aqueduct to the old subterranean *specus*. This branch is a square brick pipe upon a rapid slope, and an arch of Nero is built to support it, quite distinct, and at a different level from, the other arches of the arcade. By the recent excavations we are now able to see the point where the small branch pipe enters into the old large subterranean *specus*. The engineers of the Acqua Felice, as usual, have made use of it to carry their pipes upon, here on the outside of the brick pipe, afterwards inside of the large tunnel or *specus*.

Perhaps the most important excavations made by the Society have been in the valley between the Cælian and the Aventine, on both sides of the Via Appia.* On the cliff of the Cælian, about two hundred yards from the great reservoir at the Arch of Dolabella, are two more reservoirs (*castella aquæ*) of fine brick and reticulated work of the time of Trajan. Of the upper reservoir, which is the most conspicuous, only two chambers remain standing clear out above the cliff (see Plate IV.); of the lower one, which is connected with it, and only a few yards

* For a general plan of this Valley see Plate III. The most important points are thus indicated:

A.A.A.A. San Gregorio. B.B. SS. Giovanni è Paolo. C.C. S. Thomas in Formis. D. S. Maria in Domnica. E. *Piscina Publica*. F.F. *Agger*, and Aqueduct. G. *Porta Capena*. H. *Castella Aquæ*. I. *Camenæ* (?). K. *Fons Egeriæ* (?). L. S. Balbina. M.M. Remains of *Thermæ*. N. Villa Mattei. O. S. Stefano Rotondo. P. Arch of Dolabella. Q.Q. Remains of Aqueducts. R. Remains of *Claudium*.

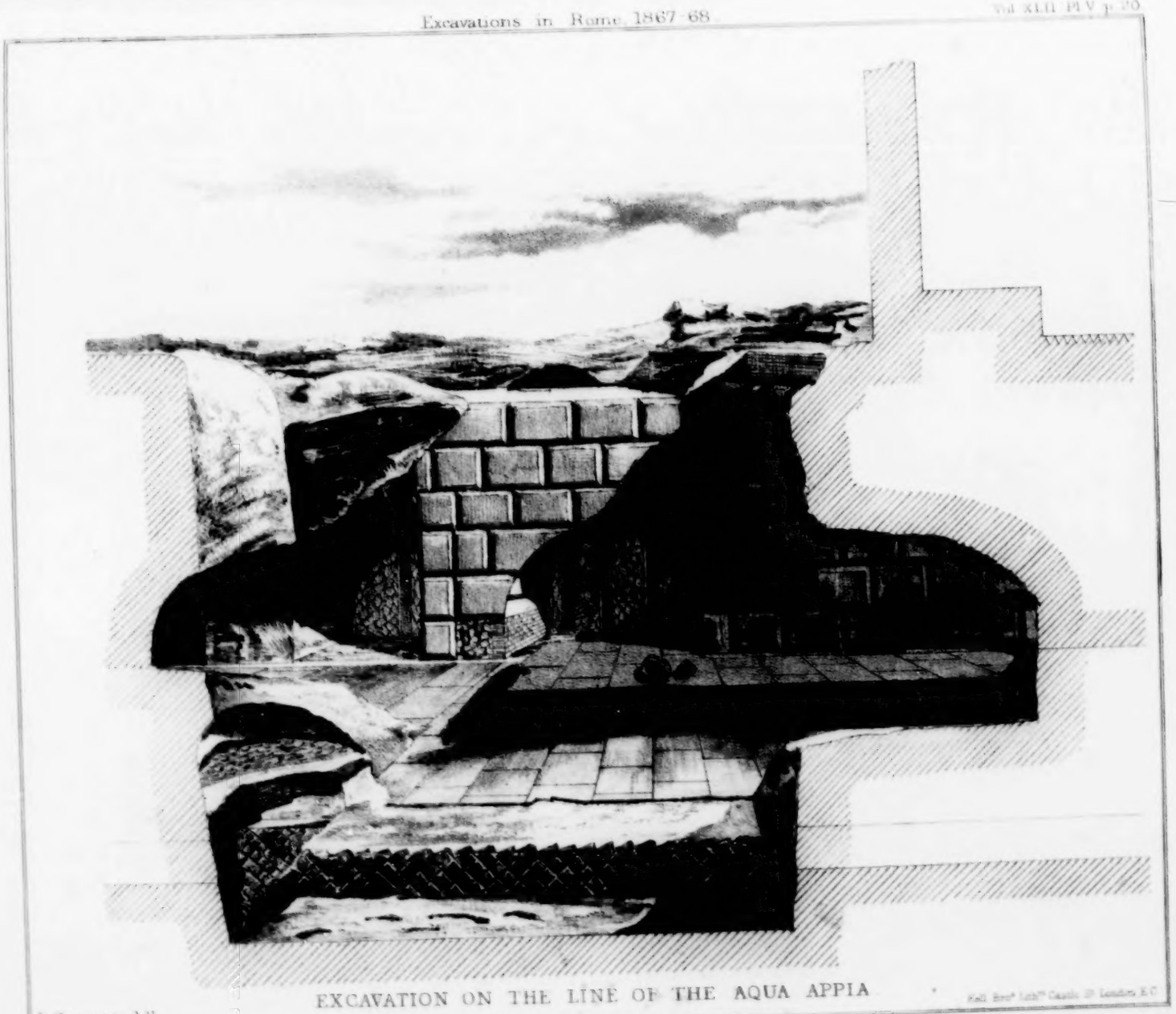
Published by the Society of Antiquaries of London, 1869

to the south of it, there are five chambers excavated in the cliff, with a *specus* running through it from the upper reservoir, and another *specus* carried on an arcade along the face of the cliff in front of it. All this is in the fine brickwork of Trajan. The object of this branch seems to have been to carry water to some extensive *thermæ* further to the south, of which there are remains in subterranean chambers not yet excavated on the eastern side of the Via Appia opposite to the *thermæ* of Caracalla.

Immediately to the north of these two reservoirs is another large one in the valley below, at a considerably lower level and at a right angle to them. This is at the foot of the Cælian, and fills up a great part of the space between the cliff and the Via della Porta S. Sebastiano. It is now turned into a gardener's house for the vineyard of the Monks of S. Gregory. It has for the most part been rebuilt in modern times of old materials; but two piers of the tall brick arcade of Trajan across the valley are built up in it, and part of the inside of the walls is lined with the well-known concrete for water in use in the time of the Empire. By making excavations in the chamber nearest the cliff we ascertained that the outer wall to a great depth is built of large squared stones in the style of the Kings. The outside of this thick stone wall is faced with brick, but this may have been a repair of a much later period. The house consists of five parallel chambers of the ancient reservoir, those of the Appia under ground, of stone, those of Trajan above ground, of brick. At the opposite end of this reservoir, between it and the present road, another excavation has been made by the Society to the depth of thirty feet, and here we have found the two arcades, the lower one of stone for the Appia, the upper one of brick for the aqueduct of Trajan to the Aventine, (see Plate V.)[a] and the lower part of the Porta Capena was found between this and the cliff of the Cælian. The line of the Via Appia has been altered in this part. On the other side of the road the line of brick piers for the tall arcade of Trajan may be plainly seen, extending as far as the ruins of the Piscina Publica, to which it was united at the north-east corner. Of the Piscina Publica the ruins are extensive, consisting of several parallel chambers as usual. We excavated one of them down to the pavement, the others would have been merely repetitions.

About a hundred yards beyond the Piscina Publica we arrive at the cliff of the Aventine, against which the aqueducts were carried. There are remains of that of Trajan; but, as the ground here rises, the Appian is under ground. There is

[a] This Plate shows the excavated pavement of the *via* with the raised sidewalk or *crepido*. Beneath this is to be seen the *specus* (the roof supposed to be removed) of a third aqueduct found beneath the pavement.



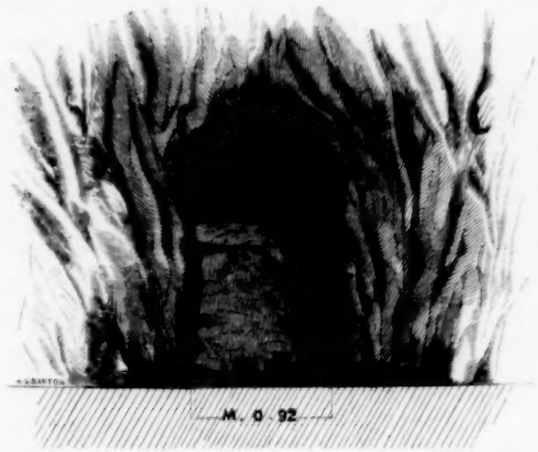
EXCAVATION ON THE LINE OF THE AQUA APPIA.

F. Cicconetti, del.

Published by the Society of Antiquaries of London, 1868.

another reservoir of the first century near the angle of the Aventine, belonging to the aqueduct of Trajan; and in continuation of the same line in the valley, between the Pseudo-Aventine and the Aventine proper, the aqueduct of Trajan may be traced to the point where it crossed the valley on a lofty double arcade, like the arches of Nero, to the reservoir on the top of the Aventine opposite the Palatine, which remains, with part of the arcade and of the *specus*.

In the early part of the same line, as far as the angle where the Trajan turns off, the underground Aqua Appia may be traced by a series of wells going down into the *specus* for the purpose of drawing water and giving air. The wells are filled up with loose earth, but their sites are marked by a hollow in the ground. A little further on in the direction of the Tiber, the *specus* of the Aqua Appia is visible in a subterranean stone quarry excavated in the Pseudo-Aventine near S. Sabba and S. Balbina. The *specus* itself is six feet high and three feet wide,



sufficient for a man to walk in, but the lower half of it is filled up with a deposit of fine clay left by the water to the depth of three feet. The upper foot of clay has a sort of groove left on each side by the action of the water. (See woodcut.) This quantity of clay deposit was probably the reason that this aqueduct went out of use, and it had been out of use for many centuries when the proprietors of the land thought of turning it to account by making it a stone quarry. It was easy for a man to cut away one side of the *specus* and enlarge it sufficiently for a horse and cart to go along it; this has been done for some hundred yards, in which the *specus* can be traced only by the wells which remain in the vault over head. Further on it was found more convenient for the stone quarry to be divided into different branches, and here the old tunnel *specus* is left intact, entirely unaltered. We

have several times sent a boy along it with a light, passing two of the old wells, but, as they are blocked up above, he was obliged to return for want of air.

The upper parts of these wells and the reservoir at the foot of the Pseudo-Aventine before mentioned are in the ground occupied by the Emperor of the French for receiving the earth which is excavated on the Palatine and brought here in carts. Signor Rosa, who is employed by the Emperor to superintend these works, peremptorily refused permission to the British Society to open the tops of these wells or to examine the reservoirs.

The source of the Aqua Appia is in another ancient stone quarry near the Via Prenestina, seven miles from Rome, where a very remarkable series of caves and reservoirs remain nearly perfect. This was quite unknown to the Roman antiquaries, until recently discovered by Signor Gori for the British Society, following the directions of Frontinus. The mouth of the Appian aqueduct has also been found on the bank of the Tiber near the Marmorata, the ancient Salaria. It is a large cave, and three *specus* run into it; two of these appear to be branches of the Appia, the third is a cascade *specus* belonging to the aqueduct of Trajan, and comes down with a rapid slope from the garden of the monastery of S. Sabina on the cliff above, northward of this cave. There is another cave in the cliff above, described by Piranesi, but now closed.

To return to the valley between the Cælian and the Aventine. Some further excavations have been made this season a little to the southward of the reservoirs before mentioned, where another gardener's house has been made out of the ruins of another building of importance, of which we have a mere fragment remaining, consisting of three or four rooms only against the cliff, and one above on the cliff. At first we thought this was another reservoir for the aqueducts, but on examination we found such was not the case. We excavated one chamber down to the foundations, about 20 feet, and found the walls faced with fine reticulated work of early character, apparently of the time of Sylla. At the bottom we came to an original doorway, which shows that it could not have been a reservoir of water. This chamber is separated by a wall from another which is faced with brick of the time of the early Empire. The branch aqueduct evidently passed behind this building, and there is a reservoir for it beyond, but it was independent of the building, which does not belong to it. In one of the chambers is a deep well or cave, with a natural spring of pure water in it independent of the aqueduct. This building is most probably a fragment of the Camenæ, and this well was the spring or fountain of the Camenæ. Near to this, in another garden, now belonging to the Villa Mattei, is a small building, of rather elegant character, of the

seventeenth century, with a bath in it, in which is another spring of very pure water in a cave at a considerable depth. This is probably the fountain of Egeria. The house of Numa is believed to have been on the Pseudo-Aventine, where the monastery of S. Balbina now is, and the situation of the spring or fountain in a cave in the valley below agrees with the description of the poets.

We have not confined our explorations to the aqueducts, but have endeavoured to ascertain other points of interest, and in this also we have been fairly successful. We have made some excavations in a cave under the north-west corner of the Palatine hill, near the church of S. Anastasia, where the springs of the Aqua Argentina gush out of the rock and are received in this cave, by the side of which a *specus* or conduit is provided for them. A passage in Dionysius of Halicarnassus seems to identify this cave with the Lupercal rebuilt by Augustus, and there are two doorways of brick of the character of his period. These doorways from their position appear to have communicated with the street made by Julius Cæsar on the side of the Circus Maximus, of which a portion was excavated by the Emperor of Russia some years since, and remains visible under the church, very near to this cave.

We have also found the principal chambers of the celebrated Mamertine Prison. The two chambers under a church at the foot of the Capitol, usually shown as *The* Mamertine Prison, are only the vestibule to it; from the lower chamber a long subterranean passage leads to the other chambers of the prison. This passage was knee-deep in water when we began our explorations, owing to a drain having been stopped up, but this water has been drawn off by removing the obstacles in the drain, and repairing the vault. The principal chambers are very long, forty feet long by fourteen wide in two stories, both now underground, but not so originally. The walls are of *tufa* in the style of Servius Tullius, and part of the prison has always been called the Camera Tulliana. The upper part of one side has been rebuilt of *travertine* by Julius Cæsar, and faced towards his forum, of which it formed one side. This arcade was mistaken by Canina for shops, but has not at all the character of other shops of that period, of which some remain in the street before-mentioned under the Palatine. This arcade of *travertine* rests upon a wall of *tufa* below visible in a cellar; the outer side is buried so deep that it is impossible to see what it has been, but the inside is now turned into cellars, to which we obtained access readily as soon as we had ascertained the proprietors.

The investigations of the British Society have not been confined within the walls of Rome, but have extended into the Campagna, with the object of tracing

the aqueducts to their sources when within reach of Rome, and to the great *piscinæ* or filtering-places between seven and eight miles from Rome, for those that are brought from a distance. We have found the sources of the Appia, the Virgo, the Tepula, and the Julia. The Anio Vetus comes from beyond Tivoli; we have found a portion of a *specus* believed to belong to this about a mile beyond Tivoli, at the foot of the arcade of the Claudian and the Marcian, which run parallel to each other throughout a great part of their course from Subiaco, forty miles from Rome, but we have not been able to trace it all the way. We have found, I believe, all the *piscinæ*, and from thence the line of the arcades carrying the different *specus* into Rome is well known. In searching for the *piscinæ*, and the reservoirs mentioned by Frontinus, we had considerable difficulty at first, because the measurements did not agree: we ascertained, however, that Frontinus measures from the existing outer gates, the Porta Maggiore or Prænestina, and the Porta Latina, and not from the gates of the old city in the inner line of defence as had been always asserted. It was also found that the roads near Rome had been considerably altered. The original roads were bridle-roads only, and were so very numerous, and so close together near to Rome, that when they were altered into carriage-roads it was found necessary or expedient to run two or three into one main road for carriages, leaving the old bridle-roads unaltered, which still exist to a great extent as country lanes, very much like our Devonshire lanes. They are often excavated to a considerable depth with the cliffs left on each side; more often the cliffs are sloped off more gradually and tombs built upon them. The double line of tombs always indicates an old road.

The Via Latina, for the first three miles out of Rome, is a bridle-road of this description, sometimes deep, in other parts on the level, according to the nature of the ground and the situation, but always marked by the line of tombs. One branch of an aqueduct believed to be the Anio Vetus follows this road, sometimes on one side, sometimes on the other, and there are at least five reservoirs in the two miles nearest to Rome, all rather of early character. One is very curious, a square chamber cut in the rock by the side of a cliff to a great depth—probably thirty feet. The others are buildings of the time of the Republic, in a ruinous state. At three miles from Rome the Via Latina meets the Via Asinaria, which has been converted into a carriage-road called the Via Appia Nova. The Via Latina crosses this road obliquely, and continues on the other side to the north, running nearly parallel to it for some distance, and gradually diverging from it northwards. The arcades of the aqueducts run near to this part of the Via Latina as far as the *piscinæ*. The Via Appia Nova goes more towards the south, and is united with the Via Appia

Antiqua at eleven miles from Rome on the road to Albano and Capua. This new road has tombs of the time of Trajan and Hadrian by the side of it, not only in that part which was originally the Via Asinaria, but also in that part which never was anything else but the Via Appia Nova. Such of these tombs as were of stone have been used as quarries to build the low walls by the side of the road, the foundations only being left in their places; but those which were of concrete, faced with brick only, would not pay for the labour of pulling them down, and were therefore left standing, and these have the distinct character of the period mentioned. One of them in particular is remarkably fine, and may very well be of the time of Frontinus himself. There can be little doubt that this is the Via Nova which he mentions, stating that one branch of the Anio Vetus passes it on its way to Rome, after leaving the reservoir at two miles from Rome. We have found a reservoir at exactly two miles from the Porta Maggiore, and the *specus* of the aqueduct must cross the Via Appia Nova to get to the Via Latina, where we find it as Frontinus has told us. He mentions another reservoir of this aqueduct four miles from Rome, and this also we believe we have found at four miles from the Porta Prænestina or Maggiore, a little beyond the Torre Fiscale on the Via Latina. The present carriage-road, called the Via Prænestina, is not the same as the old bridle-road of that name which still exists running parallel to it for the first three miles from Rome, little more than a quarter of a mile to the north of the carriage-road. The present road was originally called the Via Gabina, and it goes straight to Gabii, the very interesting ruins of which are close to it at eleven miles from Rome. It then goes on to Præneste or Palestrina, some ten miles further, but this is not the most direct road to Præneste, which went through Collatium. After three miles from Rome a part of the old road is made into an indifferent carriage-road, with a short branch connecting it with the present road just beyond the villa of the Gordiani called the Torre dei Scavi: this part of the old Via Prænestina is now called the Via Collatina. The sources of the Appia and the Virgo are both near to this part of the road, but the Virgo continues along the bank of the old road to within half a mile of Rome, when it comes to the edge of the great foss and turns along the outer bank of the foss to the north, until it reaches the high ground near the Monte Pincio, through which it enters Rome. The course of the Appia has not yet been traced in this part; its great depth makes it very difficult to find, and it has no respirators as the Virgo has, by which that is easily traced. The line of the others is obvious by their fine arcades.

During the present season we have nearly completed our series of archæolo-

gical photographs; we have now upwards of a thousand, which have been taken expressly for us, and, although there are a few gaps still to be filled up, we are able to begin the systematic arrangement, and have issued a programme of it. The first part is now ready, and illustrates the historical construction of walls in a series of sixty-four examples in chronological order, beginning with the wall of Romulus, seven hundred and fifty years before the Christian era, and taking on the average one for each generation; the series is continued down to the thirteenth century after Christ. In the time of the Empire the dated examples are so numerous that they are necessarily subdivided; afterwards the churches and monasteries supply us with a continuation of the series. This is really a great work for the history of architecture, such as has never been done before. Even D'Agincourt in his admirable work overlooks construction, which is the foundation of all. In another year we hope to complete other divisions in the same manner, and to substitute accurate photographs for inaccurate drawings. Photographs from nature and from drawings and plans have been taken of all the recent excavations mentioned in this lecture. It is sometimes impossible to get photographs from nature for want of sufficient space, and it is generaliy necessary to fill up the excavations again immediately, so that plans and drawings are the only mode of showing what has been made out. Of these plans and drawings photographs are taken for the use of students, and a set is presented to the Oxford Architectural Society for the use of the members, who we hope will all become real students of archæology, which is in other words history in detail.

III.—*An Examination into the character and probable origin of the Hill Forts of Sussex.* *By Colonel* Augustus Henry Lane Fox, *F.S.A.*

Read February 6th, 1868.

In the month of September last whilst staying at Brighton I examined nearly the whole of the ancient earthworks which occupy the summits of the highest eminences of the Downs between Beachy Head on the east, and the neighbourhood of Chichester on the west.

The tract of country known as the South Downs, forms, as is well known, the south-eastern portion of that barrier of chalk hills which surrounds the great weald valley on its north, west, and south sides.[a]

The South Downs, properly speaking, extend no further westward than Shoreham, but the district referred to in this paper includes a continuation of these downs to the westward, and embraces, in all, a belt of hills running east and west for about fifty miles, and averaging five miles in width. It is bounded on the south and east by the precipitous sea cliffs, and the low ground in the neighbourhood of Eastbourne. From Brighton westward, the southern margin of the hills is separated from the sea by the low tract of tertiary formation which extends from that place to Chichester and Selsea Bill.

On the north it is bounded by the weald valley, in which in ancient times was situated the great impermeable forest of Anderida, and which, in consequence of the great width of the hedge-rows throughout the weald, still looks, when viewed from the heights, like a thick unbroken forest.

From this valley the downs which I am describing rise everywhere abruptly to a height, in some places, of 700 and 800 feet above the sea-level, and throughout the whole extent of the northern boundary of these hills from east to west it has everywhere the appearance of a sea-cliff overlooking and commanding an extensive view of the wooded valley to the north.

After passing to the southward of this line, the aspect of the country entirely changes, and instead of a wooded and comparatively flat surface the ground from this ridge falls, in conformity with the natural dip of the chalk strata, in a succession of round-topped hills and coombs, entirely devoid of tree or hedge-row, sloping gently towards the sea.

[a] See Ordnance Survey, sheets Nos. V. and IX. scale of one inch to a mile.

There is only a scanty supply of vegetable mould upon these hills, and the hard chalk rubble beneath the grass, undisturbed by cultivation until within the last few years, has preserved with wonderful distinctness every break on its surface which during past ages has been caused by the hand of man. So that the faintest trace of an earthwork may sometimes be seen for miles upon the green sward.

Indeed the whole aspect of the country, viewed as a panorama that presents itself to the spectator from most of the hill tops, must still convey to him very much the same appearance that it did to the ancient Briton, and on this account there is perhaps no part of England that will more quickly repay the pre-historic archæologist for the trouble of exploring it. The belt of hills above described is traversed in four places by rivers running through it from the weald valley in a southerly direction towards the sea. These are, commencing from the east, the Cuckmere, the Ouse, the Adur, and the Arun.

These rivers now wind their way from side to side in the flat bottoms of the valleys through which they pass, but all appear originally to have been arms of the sea. For, while the sea has everywhere encroached upon the cliff throughout this district, the rivers, on the contrary, have gradually become silted up, and several of the ports on this coast, which, even within the historic period, are known to have existed at the mouths of the rivers, have long since been destroyed.

Thus the Cuckmere derives its name from having been originally a mere or lake. At Exceat bridge, the alluvium, bounded at various points by low chalk cliffs, shews the bed of an ancient estuary of considerable size,[a] and the haven at its mouth, for the use of which there is a local tradition, perhaps not very well founded, that the Dutch once offered our Government as much as a million sterling, has been choked up from time to time, and the outlet for the waters is now kept open only by the use of harbour ploughs for removing the shingle.

The Ouse appears to have been an estuary or marine lake for some distance above Lewes, at which place, in the neighbourhood of Eastport Lane, an anchor was dug up during the last century, and another at Landport, higher up to the west, shewing that these localities must have derived their names from a period when Lewes was a seaport. Similar evidence is also furnished by the alluvial deposit in the flats, which, according to Dr. Mantell,[b] is in part composed of silt

[a] "Rivers of Sussex," by Mark Antony Lower, M.A. F.S.A.—*Sussex Archæological Collections*, xv. 148—164.

[b] Mantell's *Fossils of the South Downs*, p. 286. *History and Antiquities of Lewes.* By the Rev. T. W. Horsfield, F.S.A. i. 59.

or blue clay varying from three to twenty-five feet in thickness containing marine shells in the lower, and fresh-water shells in the upper beds, the intermediate layer being composed of both kinds mixed indiscriminately, thus shewing evidence of a gradual transition from an estuary to an inland lake. The names of Lewes, Northese, and Southese upon the sides of the valley being all derived, as is supposed, like the word ouse itself, from the Celtic word *isca*, *ese*, or *ys*, signifying a piece of water,[a] also point to a time when these spots were situated on the water's edge. In the Roman age it has been conjectured from the level at which coins have been found, and the small amount of deposit that has accumulated above them, that the valley must have been marsh land,[b] subject perhaps to frequent inundations. Etymological evidence would also warrant us in concluding that the same features of land and water prevailed in the Saxon era. The hundred of Holmestrough, called in the Domesday Holmestrew, in the parish of Telscombe, on the western bank of the valley, derives its name from the British word *treu*, a town, and *holmes*, the Saxon word signifying watery lands. I examined the whole of this bank from Southese to Newhaven in the hopes of finding vestiges of lake-dwellings, of the former existence of which we may perhaps assume that some record is handed down to us by the name thus given to the locality. The lines of the ancient water-levels may be very distinctly traced on the western sides of the valley. The plot of ground on which the ancient church of Piddinghoe, with its curious round tower, now stands, has all the appearance, from its outline and position, of one of those *cranogues* that are found in the Irish and Scotch lakes. It consists of a circular hillock, jutting out into the level bottom that was formerly occupied by the water. On the inner or land side of the churchyard, which is nearly circular and conforms to the outline of the ground, two large blocks of Druid sandstone, about three feet high and the same distance apart, have been built into the wall. They have evidently been transported to the position in which they now stand, and may very possibly have marked the entrance to some heathen temple, the appropriation of which as a place of religious worship has been perpetuated by the erection of the present church.[c]

The history of the gradual closing of this river may be further traced during the historic period. Seaford, at which place the river formerly had its outlet, and

[a] Horsfield, *History of Lewes*, p. 10—14.

[b] *Ibid.*

[c] It may, perhaps, be considered in some degree confirmatory of this assumption, that the church in the adjoining village of Southese (which has a round tower exactly resembling that of Piddinghoe, and of the same date) was discovered, in 1851, to stand on the site of an ancient tumulus.—*Sussex Archæological Collections*, v. 205.

from the good harbour of which ships of war formerly set forth, appears to have entirely lost its advantages as a seaport in the reign of Elizabeth; and at the present time no trace of the harbour remains. The bed of the river is now a cricket-ground;[a] and the river, gradually working its way westward, now has its *embouchure* at Newhaven. In like manner it has been proved by Dr. Mantell that the valleys of the Adur and the Arun were originally occupied by arms of the sea which were gradually silted up. Marine shells are to be found lying on the banks of ditches as high up in the Adur as Bramber Castle;[b] and the discovery of two ancient British canoes, composed of hollowed oak trees, on the banks of the Arun,—one, in 1857, at Warming Camp, a mile distant from South Stoke, the other, in 1834, at North Stoke, six feet below the soil, and 150 yards from the present river,—is sufficient to prove that a great expanse of water must have existed at those places at the time it was navigated by these vessels.[c]

From the evidence thus collected from various sources it will be seen that at the remote period to which I shall subsequently shew reason for believing that most of the earthworks on the downs must be attributed, the belt of hills on which they stand must have been divided into five groups, each separated from the other by an expanse of water and marshland, a circumstance worthy of being noted when discussing the facilities of communication which existed between these works, and the support they are supposed by some writers to have afforded to each other in the general defence of the coast.

Considering the swampy and impassable nature of the great forest on the north, these several groups must have been almost isolated; and the only means of communication between them, except by canoes, must have been along the northern slope of the downs, between the heads of the waters and the forest of Anderida.

Sufficient traces of an ancient roadway exist to the present day along this northern ridge of hills to prove that this must, in fact, have been the great thoroughfare of the inhabitants in ancient times. At every two or three hundred yards between Ditchling and Lewes the track of an ancient pathway may be seen running obliquely down the hill. In some places a line of road, running east and west, may be distinctly traced about halfway down the hill; and on the summit lines of deep furrows, running in and out of each other in the same general direction, show evident traces of the continued traffic of animals.

Turning our attention now to the intrenchments, we find several accounts of

[a] *Memorials of the Town, Parish, and Cinqueport of Seaford*, by Mark Antony Lower, M.A. F.S.A.

[b] Dixon's *Geology of Sussex*, p. 48. Bramber Castle is most likely the Portus Adurni of the Notitia. See Archæologia, xli. 439.

[c] Murray's *Handbook of Kent and Surrey*, p. 316.

them given in the Sussex Archæological Collections. In the first volume there is a paper on the Celtic antiquities near Chichester by the Rev. Leveson Vernon Harcourt, in which the learned author appears to consider the majority of the tumuli and earthworks in that neighbourhood to be places of religious worship. This is followed in the third volume by an admirable paper on the subject by the Rev. Edward Turner, read at the Brighton meeting, April 1849. Perhaps, however, the best account which has appeared of these camps is one by Mr. George Vere Irving in the Journal of the Archæological Association.

As I shall have occasion to refer to the opinions of these writers when describing the several camps which I have examined, it is unnecessary that I should here allude to them further than to remark that Mr. Irving's paper, which I had not seen at the time I was in Sussex, is particularly interesting to me from the fact of its being supported by excavations made by himself in the identical earthworks which I had examined, and which form the more particular subject of my present communication.

Although it will be found that I shall be compelled to differ from him in some of his conclusions, Mr. Irving's treatment of the subject has the merit of illustrating his views by the known principles of castrametation which have been handed down to us by Vegetius and other authors, and also of comparing these works with others of a similar nature in Lanarkshire, which he had before had an opportunity of examining. The advantage to be derived by applying to the study of ancient fortifications some knowledge of the general principles of military science, has been so well exemplified in the great work on the Military Antiquities of the Romans by General Roy, that I cannot, perhaps, do better than quote his remarks upon this point:

"That the principles of war," he says, "are fixed and general, varying only with the local circumstances and situation of the country, we doubt not will be admitted; whence it follows that some knowledge of modern military operations seems necessary to enable us to trace with success the motions of a Roman army; and whoever has been accustomed to observe the one with most attention will in all likelihood not only find it easiest to trace the other, but at the same time will perceive a very great resemblance in the leading principles on which they respectively acted. With regard then to the military antiquities, it seems to have been a misfortune that few of the commentators who have treated on this subject, however well qualified in other respects, have been military men."[a]

[a] *The Military Antiquities of the Romans in North Britain*, &c. by Major General Roy.—Prefatory Introduction, p. 5.

These remarks must serve as my apology for embarking in a subject which has already been so ably treated by former writers, and to which, upon antiquarian grounds alone, I could hardly hope to add much to the knowledge already in possession of this learned society.

There is, moreover, an additional motive for reconsidering at the present time former opinions relative to the origin of these works. I allude to the circumstance that the whole of the papers to which I have referred were written at a period anterior to that in which the Stone Age of mankind began to attract attention, and I trust I shall be able to show in the course of the present communication, that the whole subject requires to be reviewed by the light that has thus been thrown on pre-historic archæology during the last ten years.

I will now endeavour to describe by means of the accompanying rough sketches from measurements taken on the spot, either by pacing, or by means of a tape and a pocket level, the several earthworks which I have personally examined.

Beltout.—Commencing on the east, the first and only work that stands upon the group of hills which lie to the east of the Cuckmere, is Beltout, occupying the whole summit of the hill above Berling Gap, and within the area of which, on the verge of the cliff, the Beachy Head lighthouse now stands. Its form, like that of nearly all the other works on the downs, is determined by the outline of the hill, along the brow of which it winds round in such a manner as to overlook with the greatest advantage the slope and the valley beneath it.

It seems highly probable that this work formerly surrounded the hill, but the southern half of it has been eaten away by the encroachment of the sea. I had not time to take a section of the parapet of this work, but it is of small relief, and has a ditch on the outside. It has entire command of the surrounding country, and is in all respects well situated for defence, excepting only as regards the supply of water, for which the occupants must have been dependent on external sources.

I found the whole of the interior of the work, especially near the parapet, and part of the slope on the outside, strewed with flint flakes artificially fabricated; of these I collected as many as I could carry away as specimens.[a] I may here observe with respect to the surface flakes that I found upon the downs, here and elsewhere, in case the reader should be sceptical on the subject of their having been produced by the hand of man, that the points which I take to determine an artificial flake are as follows:—

[a] These specimens were exhibited on the occasion of the reading of this paper.

Fig 14.



Fig 5.



Fig. 12.

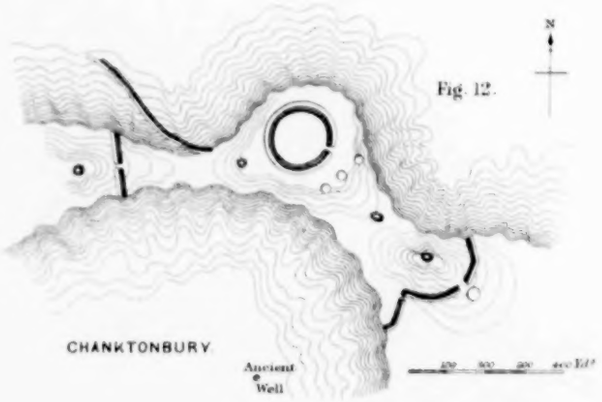


Fig 17.

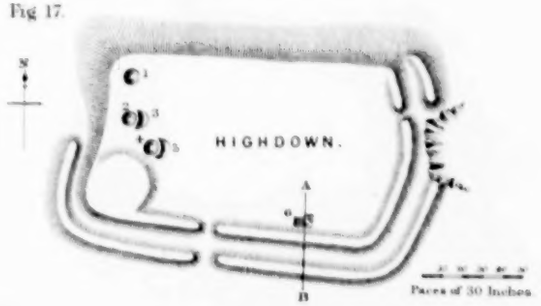
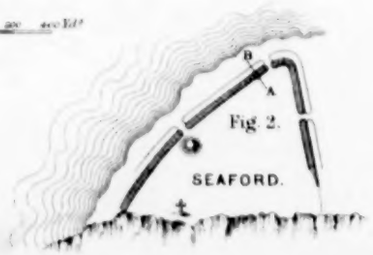


Fig 1.



Fig 2.



MOUNT CABURN.

Fig 7.



A Lane Fox, Del.

Kell Bro.s Lith. Castle St Holborn

Published by the Society of Antiquaries of London. 1869

Supposing the core from which the flake is struck off to be held upright, as represented in Plate VI. fig. 1, and the blow or pressure delivered vertically, the flake struck off, represented by the shaded portion of fig. 1, will usually have a flat surface on the top whence it received the blow. This is caused by the first stroke of the fabricator, who commenced operations by striking off one end of the flint core or nodule in order to produce a flat surface to receive the blows of the stone, or whatever other material he employed as a hammer. This top surface of the flake generally forms an obtuse angle with the inner surface that has been cleaved off from the core, as represented by the dotted line in the figure. The bulb of percussion caused by the conchoidal fracture of the flint will be on the inner or flat surface of the flake near the point where the top surface was struck by the hammer. The outside of the flake will have two or more longitudinal facets with a rib or ribs between, caused by the removal of previous flakes from the core, so that the cross section of the flake will usually be angular, as shown in the shaded cross section. These points will, I think, be admitted by all pre-historic archæologists to be sufficient to distinguish an artificial flake from one of natural formation; and, although these characteristics of the flint manufacture are pretty generally known to all who have given their attention to the subject, I have thought it necessary to describe them here, because, as they afford the only evidence of British origin that I have discovered in most of the forts it is necessary I should explain clearly what it is I mean when I speak of a flint flake.[a]

It may at first sight appear surprising that flakes struck off at so remote a period should still be found on the surface lying upon the grass, and not have been buried in the earth. But it must be remembered that on the tops of the hills upon the downs the vegetable mould is rarely more than from one to three inches in thickness, and in some places the chalk rubble is quite bare, so that a flake thrown down upon the surface in ancient times might remain for any number of ages uncovered. I examined some of them as they lay upon the ground, and found that the grass had not grown underneath them; others appeared to have been removed from their original position, and scattered upon the grass. The most usual situation for finding the flakes is in places where the turf has been removed. All the flakes have turned white to a depth of from an eighth to a quarter of an inch by decomposition of the surface after fabrication.

Seaford.—The next work to the west, forming the solitary occupant of the group of hills between the Cuckmere and the Ouse, is the camp above Seaford.

[a] See Proc. Soc. Antiq. 2 S. i. 73.

It consists of two faces, as represented in the plan and section (Plate VI. fig. 2, and Plate VII. fig. 3). That to the north-west is slightly curved, that to the east is straight. The ditch is on the outside. The sea, as at Beltout, has destroyed a portion of the work. The north-west face conforms to the outline of the hill, but the eastern face cuts straight across the plateau on that side. It has three entrances, one to the east, and two on the north-west face. One of these latter has a mound in rear, and a little on one side of the opening, which may possibly have been connected with the defence of the gateway. It is worthy of note that in the camp on Bodsbury Hill, figured in the paper by Mr. Irving in the tenth volume of the Journal of the Archæological Association, similar mounds are represented at each of the two gateways. Water for the supply of the camp must have been obtained from a spring at the bottom of the slope to the north, near which place traces of several rectangular inclosures probably mark the site of an ancient village. I found a few flints on the hill to the east of the fort, but none of artificial construction within the inclosure.[a] The earthwork at Beltout can be seen to the east, and that of Newhaven to the west. Local tradition assigns this camp to the Romans, and, although I am not aware that any actual evidence of Roman occupation has been discovered within the work, the rectangular outline of the portion of it which still remains, and the possible existence of some kind of traverse for the defence of the gateway, gives to this work more the appearance of a Roman entrenchment than any other I have seen on the downs. We also learn from Mr. Lower's work on the cinqueport of Seaford, that many traces of Roman occupation have been found in the vicinity.[b]

The Castle, Newhaven.—Three miles west of this fort, upon a commanding height, and, like the two just described, partly destroyed by the erosion of the cliff, stands the intrenchment known as the castle of Newhaven. The modern work now in process of erection for the defence of the port cuts through part of the ancient earthwork, and in the course of its construction the remains of a kitchen-midden, including specimens of worked flints, were brought to light in the interior of the old work, and have been described in the Anthropological Journal.[c]

[a] Since the above was written, Mr. John Evans, who spent a few weeks at Seaford during the autumn of 1867, and who had therefore greater opportunities of carefully examining this work, has informed me that he found a scraper and a few flakes within the fort.

[b] *Memorials of Seaford*, by Mark Antony Lower, M.A., F.S.A. p. 1.

[c] *Journal of the Anthropological Society*, No. 15, Oct. 1866, clxxxvii. The deposit included, besides flints, the evidence of the artificial workmanship of which appeared doubtful, fragments of pottery, supposed to be Roman, and bones of domesticated animals.

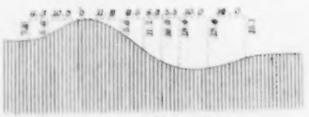
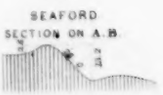


Fig 11. DEVIL'S DIKE.

Fig 3.



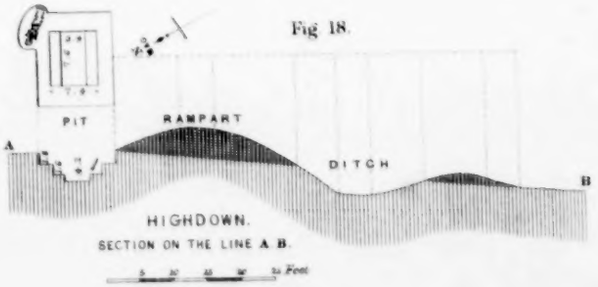


Fig 18.



Fig 13. CHANKTONBURY RING.



Fig 10. WOLSTANBURY.

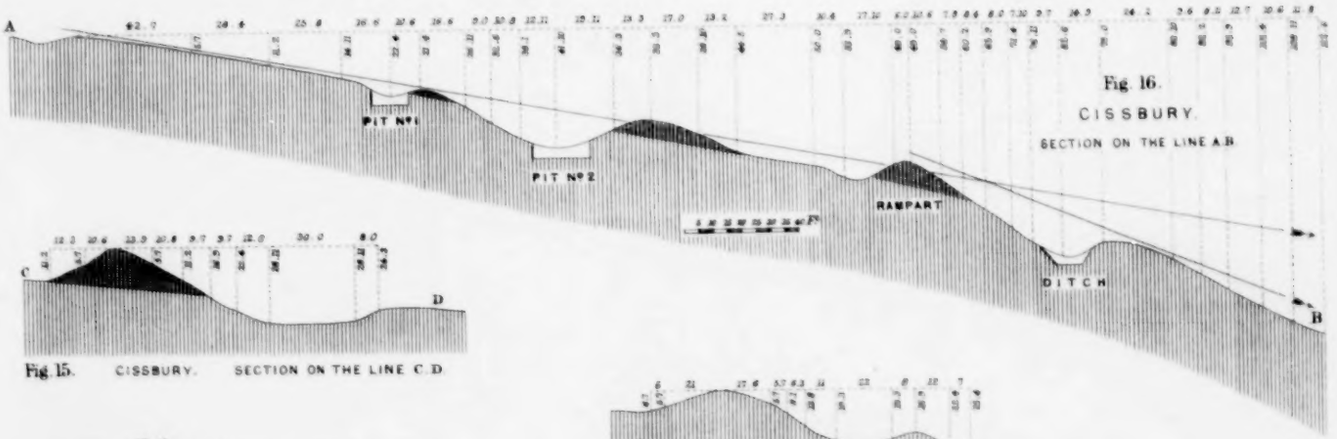


Fig 16.
CISSBURY.
SECTION ON THE LINE A.B

Fig 15. CISSBURY. SECTION ON THE LINE C.D.

Fig 4. CASTLE, NEWHAVEN.



Fig 6. MOUNT CABURN. SECTION ON A.B.



Fig 9. DITCHLING

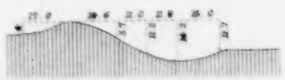


Fig 8. MOUNT CABURN. SECTION ON C.D.

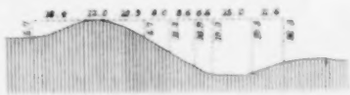


Fig 19. St ROCHES HILL, CHICHESTER



Fig 20.

A. Lane Fox, Del.

Hall Bro.s Lith. Castle St Holborn

Published by the Society of Antiquaries of London 1869

About 1680 yards of the northern front still remain, and it appears to be arranged in a succession of re-entering curves and salient points, but the whole configuration of the surface has been so much altered by deep fissures, and by the decomposition and settlement of the plastic clay on which it stands, that it is difficult to judge of its original form. Enough however remains to show that this work, like that of Beltout, occupied the whole summit of the hill, and conformed to the outline of the brow. Advantage was probably taken of a natural terrace to give additional command to the rampart. Plate VII. fig. 4 is a section of the only portion of this work in which any trace of an external ditch is discernible. The fort commands the whole of the surrounding country, but the view is limited to the north-west.

Mount Caburn.—We now come to a series of works in the neighbourhood of Lewes. The cliff-hills to the north-east of the town form an outlying group of the downs, separated in former times from the main chain by the estuary of the Ouse, which extended from Glynd on the south-east of this group, to Hamsey and Barcombe on the west, and covered the whole of the level tract called Ox-settle Bottom to the south.[a]

Traces of a Roman ford have been discovered at Glynd; and upon the northern slope of the cliff-hills vestiges of an ancient roadway running from that direction to the west may be distinctly traced.

The group consists of a ridge of hills extending along its southern, eastern, and northern margin, and surrounding a deep valley which opens out westward in the direction of Lewes. On the south-eastern extremity of this ridge, which is the highest point, is situated the earthwork of Mount Caburn (Plate VI. fig. 5).

This work Mr. Turner, following Mr. Vernon Harcourt, considers to be a place of druidical worship. "It is constructed," says he, "of a double vallum, corresponding with a double row of stones at Stonehenge; and the mound of earth thrown up within the ramparts corresponds precisely with the Gorseddau or sacred hillocks, from which the Druids of the higher order were accustomed to pronounce their decrees, and to deliver their orations to the people. The name too of Caburn," or Cauburn, as he writes it, "is druidical, being a corruption of Carnbrauh, which, as Mr. Vernon Harcourt observes, is still the name of a hill in Caernarvonshire, and Carnbrea the designation of a hill in Cornwall, on both sides of which are situated undoubted druidical remains."

Notwithstanding this, a careful examination of the work has been sufficient to

[a] See a map of these ancient waters in Horsfield's *History of Lewes.*

convince me that from each of the points enumerated by Mr. Turner we may derive conclusive evidence that the entrenchment is not a druidical but a defensive work.

Its circular form is attributable to its following the outline of a circular hill, in conformity with the recognised principles of castrametation observable in all the other intrenchments of the neighbourhood. The supposed Gorsedd or sacred hillock does not appear to be an artificial but a natural formation. The double vallum which Mr. Turner supposes to correspond with the double row of stones at Stonehenge is double only on the northern or weak side of the hill, from which point alone, with the then existing features of the country, a hostile attack could have been anticipated, and on which side the slope of the ground outside is more gentle than on the southern half of the fort, where the hill runs steeply down towards what in those days must have been the water's edge, and on this side accordingly there is only a single parapet of very slight relief and scarcely any perceptible trace of ditch. This is in precise accordance with the principles of defence which I shall have occasion to point out in several other works upon the downs. It is also a noticeable feature in many other ancient works that I have examined elsewhere. I have frequently observed the same peculiarity in the dikes upon the Yorkshire Wolds, and it leads to the supposition that the ramparts of these intrenchments were intended not so much to give cover to the defenders or as an obstacle to the assailants, but rather to give the defenders a command over the outside of the work. It is probable that the defenders stood upon the tops of the banks and threw their darts and other missiles over a palisade or an *abatis* at the approaching enemy.

On those sides where the natural slope of the hill gave all the command that could be desired artificial banks of any great height were unnecessary, and the defence was probably limited to a stockade or an *abatis* on those sides. This is the only way of accounting for the total absence of earthworks in some points of a line of intrenchments, where a natural declivity presents itself and where the line of fortification could not certainly have been regarded as complete or inaccessible without some additional defence.

We may therefore assume from the fact of Mount Caburn having been guarded by a double rampart and deep ditch only on the accessible side,—a section of which is given in Plate VII. fig. 6; from the inner rampart having on that side a considerable command over the outer rampart, and from the fact that all trace of this inner rampart and deep ditch ceases at the precise spot where the steep slope on the exterior commences,—that this work was without doubt used as a fortification.

The name, moreover, which is usually written and pronounced *Caburn*, not Cauburn, appears, as Mr. Horsfield has suggested, to be derived from the words *Caer*, a fortress, and *burn*, a stream, like the adjoining Glyndburn; and its etymology might rather be compared to that of Caernarvon itself than of the hill of Carnbrauh.

Mount Caburn has two gateways leading in the direction of the two ridges of hill that run from it on the north-east and west. The gateway on the north-east is strengthened by the rampart being thrown back on each side of the opening in a re-entering angle so as to command and flank the passage across the ditch, which is over an embanked causeway.

Upon the outside of the opening, beyond the ditch, there are also distinct traces of three circles covering the opening, with intervals of about twenty paces between, through which intervals the defenders from the outside might be enabled to retreat towards the gateway, covered by the fire from these advanced posts, which were no doubt palisaded all round, or possibly the circles may merely mark the huts of an advanced guard stationed outside the gate; but whatever the detail of the arrangement may have been, the position of the circles in a triangle covering the gateway makes it impossible to doubt the intention as part of the defence of the work.

Seven hundred yards to the north-east, upon the summit of the ridge, in a position in every way suited for an advanced post, and commanding an extensive view to the north, is another circle of larger dimensions, a sketch of which is given in fig. 7. It consists of a circle, sixty-four feet in diameter, with banks thrown up about two feet, and a square pit in the centre, and having two attached chambers on the west side. Between this and Mount Caburn, in a direct line, are two other circles (marked on the sketch-plan fig. 5), which appear probably to have served as connecting links. To the east of this outwork, upon the shoulder of the hill on that side, and commanding the trackway leading to the ancient ford, are two other circles, one of which appears to have been opened, probably by Dr. Mantell; but I have not been able to ascertain the result of any excavations made there. These circles I imagine also to have been fortified posts; they certainly have no appearance of having been tumuli, of which there are several on these hills.

Five hundred yards to the west of Mount Caburn, on the summit of the other ridge which runs in that direction, is another work cutting across the hill, and apparently facing Caburn, with the ditch to the east, a section of which is given in Plate VII. fig. 8. The object of this work appears doubtful. It would be quite in conformity with the system of defence usually adopted that an outwork from

Mount Caburn should be erected at this place; and the fact of the ditch being on the inside of the rampart would not in itself be sufficient to disprove the supposition that this might have been an advanced work belonging to Caburn. But the southern end of the trench bends round to the west as if to cover the right flank of a force facing towards Caburn; and this makes it hardly possible to doubt that this work must either have been a line of rampart thrown up during an attack of that place, or that it may be the eastern face of another camp, the remaining sides of which have entirely perished. As however this work has been spoken of by former writers on the subject as a camp, I examined the whole hill in the endeavour to trace out the other faces of the work. The slope of the hill on the north side is so exceedingly steep that no intrenchment would probably be required on that side; in fact the eastern rampart has no appearance of having rounded the north corner, but ends abruptly on the hill side. On the extreme west slope of the hill however there are faint traces of an embankment in the cultivated ground, which makes it appear possible that the whole summit of the hill may have been inclosed by a rampart, in which case it must have been a work of considerable size.

Mr. Turner makes use of the existence of this fortification as an argument to prove that Mount Caburn was not a fortress; "for if it were so," he says, "why should another earthwork have been formed for similar purposes close to it?" But there is no absolute necessity for supposing that these two works were erected at the same time, and still less that they were occupied by the same people. The difficulty only arises from the fallacy of supposing a connected system of defence to have been established between the several intrenchments. It appears more probable that, as suggested by Mr. Horsfield,[a] the western earthwork may have been thrown up by a hostile force, possibly by the Romans during their occupation of Lewes, with the object of keeping in check the natives encamped in Mount Caburn.

The only other objects worthy of notice on this group of hills are the artificial terraces that exist upon the southern slopes, especially in the neighbourhood of that peculiar gully to the westward known to geologists as the Coomb. These terraces inclose oblong or square plots of ground, adjoining each other and sloping towards the south. They have very much the appearance of vineyards; similar terraced inclosures are found at Cissbury, near Ditchling, in the parish of Telscombe, Seaford, Lullington, and many other places upon the downs.

I found no flints in the interior of Mount Caburn, where the mould seems

[a] *History of Lewes*, p. 37.

thicker than in many parts of these hills, and the surface remains have probably been overgrown; but upon a patch of ground marked E in the plan (Plate VI. fig. 5), from which the turf had been removed, between the two intrenchments, and also on a similar patch to the west of the rampart, I picked up a great number of flakes, some specimens of which are now upon the table. Two similar patches to the north of the mount were searched without discoveriug a single flake, although thickly strewed with flints of natural formation.

I also found in two other places on the cliff-hills collections of artificial flakes strewed upon the surface of the ground. These must no doubt be the spots where the flint manufacture was carried on. As a general rule the flakes which are so abundant in the vicinity of some of the forts are wanting on the surface of the downs, and I sometimes walked for miles in the cultivated ground in search of them without finding a single flake. The interior of Mount Caburn has been thickly studded with small pits, probably the remains of huts; they are nearly obliterated, but are still discernible. I counted as many as fifty-two of them within the fort. One to the north of the central hillock is of much larger dimensions, and may possibly have served as a reservoir. I also found some pits at the north-west extremity of the hill to the west.

Passing over an intrenchment near the Lewes Beacon on the hill to the west of the town, which I had not time to examine with sufficient care to be able to form an opinion upon it, we next come to three intrenchments lying nearly in a meridian line across the downs to the north of Brighton. These are: White Hawk Hill, on the race-course near Brighton; Hollingbury, on an isolated hill two miles to the north; and Ditchling, which stands on the northern verge of the downs upon the highest point of the range, 858 feet above the sea-level.

In the Burrell MSS. these three works are attributed to the Romans, and are supposed to be the work of Vespasian when he reduced the Regni, who inhabited these parts. Mr. Horsfield follows in this opinion, but the evidence of Roman construction does not appear to be well founded.

Hollingbury.—Mr. Horsfield considers Hollingbury to be Roman on account of its being square. Mr. Turner, on the other hand, attributes it to the Druids on account of its being "decidedly circular." From personal inspection I should pronounce it to be of an irregular square form, the corners being rounded, and the sides bulging. Such a configuration appears to have been the best adapted to the faces of the hill on which it stands. There are the remains of a bank

leading from the south-west corner of this work in the direction of Brighton. A block of Druid sandstone stands at the side of one of the gateways to the west, and another is on the parapet on the south side.[a]

White Hawk Hill.—The work on White Hawk Hill has been partly destroyed in the formation of the race-course. It appears originally to have been an irregular circle occupying the summit of the hill, the east and west sides abutting upon the slopes, and the two other sides cutting across the ridge of the hill-top, which in this place runs north and south; it has a double vallum on the north side, the only part now remaining. The work does not command the slope of the hill to the south, and I think it very probable there may have been originally an outwork on that side which has been destroyed by the erection of buildings.

Ditchling.—Ditchling, a section of the parapet of which is given in Plate VII. fig. 9, is of a somewhat quadrangular form, but does not appear to have the regularity of a Roman camp, the sides being slightly curved. The north side is secured by the declivity of the hill, which is very abrupt. A gentle slope falls from the other faces on every side. The approach to the fort up the hill-side to the north has been frequently noticed. The Rev. Thomas Hutchinson, M.A. Vicar of Ditchling, thus describes it:—[b]

"The original roadway exists to the west of the present comparatively modern road. It consists of a narrow fosse-way cut in the cliff to the depth of twelve or fourteen feet, so as to be a complete protection, and from it, about half way up the hill, the way branches off to the right for about 100 yards, running round a high mound of earth formed by the accumulation of the soil when the way was made, and returning nearly to the same point again." [This is a mistake; it rejoins the line of the valley some 50 yards higher up, having diverged in the form of an angle, of which the sides are 100 and 113 paces respectively]. Mr. Hutchinson continues: "This was manifestly done for the purpose of observation, for it happens at a point of the downs the nearest to the adjacent coomb, so that when you reach this coomb, with which the way was evidently intended to communicate, a most extensive view of the weald of Sussex breaks in upon you. A more com-

[a] Since writing the above, my attention has been drawn by Mr. Boyd Dawkins to the evidence of an extensive flint manufacture which exists in the neighbourhood of Hollingbury, and which leaves little doubt on my mind that this work, like the others, was of British origin.

[b] *Sussex Archæological Collections*, xiii. 240.

plete point of western observation cannot well be conceived." Against this hypothesis, however, it may be said; first, that it is very unlikely that a point of observation should have been constructed with so much labour half-way down the hill, when a far more extensive view could be obtained from any point upon the summit; and next, that the mound round which the roadway winds is not thrown up, but its highest part is on the natural surface of the slope of the hill, and the road has been cut in a deep trench round it. The work appears to me to be nothing more than a zigzag of ascent up the hill, a piece of rather clumsy engineering perhaps, but by means of which a rise of several feet of road is effected in a comparatively short distance. The earth excavated from the trench has probably been used to construct the embankment of the roadway up the side of the hill. Finally, it may be remarked with reference to these three works that the discovery of Roman coins in their vicinity, though it certainly implies Roman occupation, does not necessarily prove them to be of Roman construction.

Wolstanbury.—The next important work three miles to the west is that of Wolstanbury, upon an outlying spur of the downs above Hurstpierpoint. In conformity with the outline of the commanding hill on which it stands, it is of circular form, about 250 yards in diameter. The ditch is everywhere on the inside of the parapet (Plate VII. fig. 10), and in those places to the north and east where the steep end of a ravine runs close up to the work there is no parapet at all, the defenders apparently trusting to the steepness of ascent for security in those places. The interior is completely filled with pits, evidently the remains of habitations, some of which open into each other so as to form a second and third chamber.[a] To the south-east of the fort at about 300 yards from it a line of parapet with the ditch on the outside, viz: to the south-east, runs across the neck of hill which joins this spur to the main chain of the downs. This is evidently an outwork, situated onrising ground and commanding a gentle slope to the south-east. On the summit near the centre of the line, and close in rear of the trench, a cluster of pits marks probably the habitations of the outlying guard. This advanced trench ends abruptly on the brow of the hill on the north or left flank of the outwork, from which spot the hill slopes down abruptly, so as to secure that flank; but on the south, where the slope inclines more gently, the trench runs for some distance down the hill. I found several flint flakes on the

[a] Since writing the above I have ascertained that the interior of this work has been extensively dug for flints.

west slope of the fort, some of which appear to have been worked, and several more in the pits in the interior. It appears by a paper by R. W. Blencowe, Esq.[a] that flint and bronze celts and Roman coins have been found on Wolstanbury. Traces of a Roman road and villa have also been discovered near Hurstpierpoint in the meadows to the north, but the intrenchment must clearly be attributed to the Britons.

Devil's Dike.—Two miles to the south-west of Wolstanbury, and also on the northern margin of the downs, is the Devil's Dike. It is of oblong form, lying north-east and south-west, and about three furlongs in length. The intrenchment occupies a projecting portion of the hill jutting out obliquely into the weald, and separated from the main chain on its south-east side by a chasm of great depth and steepness, which from its most artificial appearance has obtained the name of the Devil's Dike, and is traditionally believed to be the work of that individual one night in an attempt to undermine and blow up the churches of the neighbourhood, an undertaking in which he was stopped short by an old lady holding a candle in a sieve, which the Devil mistook for the rising sun, and desisted from his midnight labour, thus leaving an unfinished work for the benefit of picnickers from Brighton.

On the north-west, north-east, and south-east sides the position is secured by the steep sides of the hill, and the intrenchment on these sides is accordingly of very low relief; but on the south-west side, where it cuts off the neck of hill which joins it to the main chain running from the extremity of the dike on the left, to the wealden slope on the right, the rampart has a considerable elevation, and a ditch of some depth on the outside, as shewn in the section (Plate VII. fig. 11). The position of the parapet is judiciously chosen all round, and runs, not along the top of the hill, but at a sufficient distance down the slope to enable the defenders behind it to command the approach to the work. Upon the whole the position is one of great strength and is most judiciously occupied. A good supply of water is now obtained from pumps within the inclosure. I picked up a solitary flint flake upon this entrenchment.

Chanctonbury.—The next work upon the northern margin of the downs is Chankbury or Chanctonbury, a sketch plan and section of which is given in Plate VI. fig. 12, and Plate VII. fig. 13. It is eight miles to the west of the Devil's Dike and on the opposite side of the Adur. Like Mount Caburn, it stands at the apex

[a] *Sussex Archæological Collections*, xiv. 176.

of an obtuse angle formed by the bend of a ridge of the downs. The intrenchment is circular, about 140 yards in diameter, conforming to the configuration of the ground, which slopes gently from it on all sides, except the north, where the declivity is very abrupt, and is not seen from the rampart. The view over the weald from this spot, which is 622 feet above the sea, is magnificent, and the clump of trees which now occupies the inclosure may be seen from the surrounding country for many miles. On both sides of the work, to the south-east and to the west, an outwork cuts across the neck of the hill. These works are equidistant from the central intrenchment at 380 yards from the ditch of that work. That to the west is thrown up about 100 yards short of the summit of the rise on that side, a position which appears to have been chosen on account of its being the narrowest part of the hill. The rise to its front is not sufficient to give it any material command over the work. The work to the south-east has an epaulment on the south end, where it joins the brow of the hill, and then runs north in a straight line till it comes to a plot of rising ground which it winds round in a semicircle, so as to command the slope to the east; its left rests on the steep slope to the north. In addition to these outworks, which it will be seen are analogous to those of Wolstanbury, the entrance to the main intrenchment on the east side is covered at fifty paces distance by three circles with slight depressions in the centres, resembling those outside the gateway at Mount Caburn. A similar circle covers the opening of the outwork on the east, and another, which after excavation I also believe to be an advanced post, covers at 100 yards distance the opening of the outwork on the west; the communication with the main work is also kept up by means of intermediate links consisting of mounds which have the external appearance of tumuli, which have been opened in the centre, but which, as they afforded no evidence of interments during the excavations that were subsequently made in them, I suppose from their situation to form part of the fortifications of the place.

We are thus enabled to recognize in these arrangements established principles in the castrametation of this part of the country. Whether these outworks formed part of the original design of the camp or were the subsequent additions of people occupying them in after times, is a point that it may now be difficult to determine. The fact of the outworks being of much smaller relief than the ring itself does not necessarily prove the former to be of later date, as the original constructors would naturally have devoted their chief attention to the principal work.

In the case of Chanctonbury the outworks may very possibly have been intended to cover the communication with the supply of water, for at the bottom of the

valley, on the south, there is a deep hole, now partly filled up, which can hardly have been dug for any other purpose than that of containing water; for, although it is unlikely it should ever have been a well from the great depth it would have been necessary to bore to obtain water, yet situated as it is at the junction of two coombs, it may very likely have been intended to collect the surface-drainage from the surrounding heights, and, being within command of the outworks on the summits, easy access could always be had to it from the fort.[a] I found a quantity of flint flakes within the inclosure; some of them have marks of secondary chipping.

Cissbury.—To the south of Chanktonbury, and about half way between it and Worthing, upon the highest part of the hill in that neighbourhood, which in this place is only twenty feet lower than Chanktonbury ring, and commanding the whole of the country between it and the sea, is situated the ancient fortress of Cissbury, a work which, from the size of the inclosed area and the height of its intrenchments, must be regarded as the principal stronghold of Sussex. A more detailed account of this work will be given hereafter; but, in order to compare the principles of its construction with those of the intrenchments already described, it may be as well here to mention that the line of rampart conforms to the outline of the hill, so as to include the whole summit within its area, inclosing a space of about sixty acres, as represented in the rough plan-sketch (Plate VI. fig. 14). This extensive line of rampart varies in size according to the strength of the ground it traverses. Thus on the north side it is of small dimensions; but on the south-west, where it passes over a branch of the hill having a more gentle slope on the outside, the size of the rampart is increased in height and thickness, and another of smaller dimensions is added to the outside of the ditch. On the east, where the rampart cuts off the neck of hill which runs eastward in the direction of Lancing, the intrenchment is of considerable magnitude, as shown by the section on that side, represented in Plate VII. fig. 15.; and it forms

[a] After a second visit to this place, and from information kindly afforded me by Mr. Goring, on whose property the fort stands, I have come to the conclusion that this must be an ancient well, probably constructed by the Romans, coins of which people, of a late date, were found in great numbers when planting the inclosure. During the excavations I also found Roman tiles in the advanced circles. The water supply for the original British intrenchment was probably obtained from a good spring about a quarter of a mile distant, at the foot of the hill to the north-east, to which spot there is an ancient roadway, which, like that of Ditchling, has a rampart thrown up on the side of the valley. It runs obliquely down the hill from the fort to the spring.

a conspicuous feature in the outline of the hill known throughout the surrounding country as Cissbury Knot. A comparison of this section with that taken on the north or steep side of the hill (Plate VII. fig. 16), shows that, although the rampart at the latter place has an equally imposing appearance on the outside owing to the natural slope of the ground, the area excavated and thrown up, as marked by the shaded portion of the section, is considerably less. In this section (fig. 16) we may also admire the skill displayed by the constructors in selecting the position of their rampart. Had it been thrown up on the top of the hill, a considerable portion of the slope to the front of it would have been hidden by the intervening ground, but by throwing the line forward half way down the slope of the hill, the whole of the ground on the outside of the work is exposed to the fire of the defenders.

There are four entrances to the fort, one opening on to the neck of hill to the east, two on the south, the most western of which is through a slightly re-entering angle; the rampart here and on the east side rises some feet on each side of the entrance. On the north side there is another entrance, the pathway through which is not in a direct line through the rampart, but makes a return on the ditch, by means of which the outer opening in the counterscarp is enfiladed by the rampart behind. Whether this formed part of the original design, or is an accident of subsequent creation, it is difficult to determine.

The whole of the slope on the west side of the rampart is completely honeycombed with pits of various sizes, varying from twenty to seventy feet in diameter.

The object of these pits has been a subject of repeated controversy. As I shall have to give a detailed account of the excavations I made in them, I will not now enter into a description of them further than to state that the great number of flint flakes that I found scattered around them led me to think that it might be desirable to explore them; the excavations brought to light a large number of flint implements, specimens of which are exhibited, all of the chipped and unpolished description, and no trace of metal of any kind accompanied them. As I have already described similar pits in many other forts in the neigbourhood, we shall be prepared at once to believe with Cartwright, who mentions them in his History of the Rape of Bramber, that they may be the site of rude huts.

The foundations of three small quadrilateral earthworks, marked E, F, and G, Plate VI. fig. 14, the faces of which are from twenty to one hundred feet in length, are distinguishable within the inclosure. Of these one is about forty paces in rear of, and opposite to, the southern entrance; and the other two are upon the brow of the hill, near each other, and commanding the opening on the north side.

These rectangular buildings appear from their outline to be more recent than the fort itself, and from their position may perhaps have been intended to contain the guards of the several entrances. On the south side of the hill an ancient roadway leads from the central gateway down the eastern slope of the valley in the direction of Broadwater; and on the same side of the fort, terraces resembling those of the cliff-hills near Lewes can be distinctly traced, and are known locally under the appellation of The Vineyard.

The question of the water supply for this large encampment has been much discussed. The possibility of its having been obtained from wells in the immediate neighbourhood appears to be remote, as I am informed by Captain Wisden, the owner of the property, that the nearest well now existing, at a farm a mile and a quarter to the south, is 80 feet deep, while those of Warren House, 300 yards further, are 60 feet; the wells in Findon, in the valley to the west, are also of great depth.

It has been suggested by Cartwright, and Mr. Turner mentions the same opinion, that water was obtained from Aplesham, three miles distant to the east, and that from Aplesham to Cissbury a covered way existed for the purpose of securing this supply. It is of course impossible to deny that such a communication may have been in existence at the time that Cartwright's history was published, but after examining the ground, I confess I have been unable to discover any present trace of it, or at least of its communication with Cissbury. There is certainly a line of road with a bank on both sides upon Lancing Hill running in this direction, but it is no longer visible, if it ever existed, on the hill upon which Cissbury stands. That a people, moreover, so well skilled in the art of fortification as these are proved to have been, should have selected for the site of their camp a position three miles distant from water, when another equally commanding, and otherwise suitable for defence, presented itself upon "Steep Hill" in the direct line, and in the immediate vicinity of the springs at Aplesham, appears to me so very unlikely that we ought at once to reject such an assumption. If I am asked, whence then did the supply come, I should say, without doubt, from Broadwater, which place is full of springs, one of which, sufficient for the supply of an army, rises within a mile and a half of the camp, and in the direction of which an ancient roadway is distinctly traceable, leading from the southern entrance of the camp. This was probably the source of supply of the original constructors; but some years since, I am informed, that whilst making a well at Leechpool in the bottom, a mile to the east of Cissbury, the workmen came upon an ancient well, which was utilised, and which has afforded a constant

supply of water ever since. This I imagine may have been the work of the Romans, of whose occupation of Cissbury, though probably in small force, we have now sufficient evidence, as will be proved hereafter.

In considering the supply of water for these works, we ought not however to be guided solely by the existing state of the springs at the foot of the downs, for, as we have already seen, the waters in the valley formerly stood at a much higher level, a circumstance which could not fail to have considerable influence upon the springs of this neighbourhood. Even now, I am informed by a labouring man who has been constantly engaged in the construction of wells during the last fifty years, that whenever the river is flooded at Bramber, six weeks afterwards the water rises to a considerably higher level throughout this district. These considerations appear to afford strong confirmation of the opinion, that the supply of water must have been much more copious in ancient times.

Highdown.—Four miles to the south-west of Cissbury, a much smaller work, of a quadrilateral figure, was erected on Highdown (Plate VI. fig. 17, and Plate VII. fig. 18), an isolated hill of chalk formation in the low country between the hills and the sea. There are five pits in the interior of the work on the west side, and another was afterwards discovered in the rear of the southern rampart, which will be described hereafter.

With the exception of an intrenchment at Burpham on the left bank of the Arun, which I had not an opportunity of visiting, no other work of the same character exists until we come to St. Roche's Hill, four miles north of Chichester, upon the top of the highest ground in that neighbourhood, overlooking the Goodwood race-course. Like most of the intrenchments before described, this work occupies the whole summit of the hill, and surrounds the circular hill-top. It is about 300 yards in diameter. The rampart, a section of which is given in Plate VII. fig. 19, has a considerable elevation and a ditch on the outside. It has two entrances, on the north-east and south-west. Some way down the hill on the north side there is a much smaller trench, a section of which is given in Plate VII. fig. 20, running in a concentric semicircle round the fort. This possibly may be the work referred to by Mr. Turner when he speaks of a double vallum. It is however at some distance from the interior rampart, and the fact of the ditch of the exterior and smaller rampart being on the inside *towards* the fort, renders it problematical whether this may not have been a work of circumvallation investing the place. About a mile to the south of the fort, at the bottom of the hill, there are also

some ancient earthworks, which from their general outline and arrangement convey to my mind very much the idea of having been thrown up during an attack of the great work above it. The parapets are of small relief, and a line of intrenchment may be traced from this place over the hill to the south-west in the direction of the Broil,[a] which is an ancient work of great extent defending the north and east sides of the town of Chichester. May it not be possible that these works represent the attack of the Romans upon the British post on Roche's Hill, at the time they established themselves in the territory of the Regni? Three other works at Selsea Bill, Bow Hill, and Heyshot, which I had not time to examine, complete the camps of southern Sussex.

Taking a general view of the whole of the intrenchments that I have described, what are the principles of castrametation which may be regarded as characteristic of the people by whom they were erected?

First. The intrenchments occupy the whole summits of the eminences on which they stand. Both the *extent* and *outline* of the ramparts are regulated by the features of the ground, and they invariably command the whole slope of the ground in front, and within range of the projectiles then used. This is essentially at variance with the practice of the Romans, whose camps were laid out in conformity with the strength of the force intended to occupy them, and with a chief regard to considerations of discipline and interior economy. For although it may be true, as Mr. Irving has observed, when contending for the Roman origin of Cissbury, that their camps might be either square, semicircular, or triangular, according to the nature of the ground and other attendant circumstances, yet we know from the numerous undoubted examples of their camps which have been left to us, that their habit invariably was to arrange the several faces in straight lines, so as usually to form an inclosure of oblong or square form, and that they were not always in a position to take the best advantage of the undulations of the ground.

Moreover, the tactical arrangement of the outline of the camp is not one of the points chiefly insisted upon, even by Vegetius, whose authority Mr. Irving quotes in support of his argument.

If it is contended that the regular oblong outline was employed only in works of the largest size, intended to contain a legion of from six to seven thousand men, and that smaller posts were arranged in conformity with the outline of the ground, it must on the other hand be admitted that such a work as Cissbury and the

[a] There were earth-works at Somers Town called *The Brill*, which Stukeley considered to be Roman, though Lysons (*Environs of London*, iii. 343) very strongly opposes this opinion. The coincidence of the name is in any case worth remark.

larger intrenchment upon the cliff-hills near Lewes can only be regarded as camps of the greatest magnitude, and ought therefore according to the Roman system to be rectangular.

Taking the whole circuit of Cissbury Camp and allowing two men for every yard of parapet, and a third more as a reserve, the lowest computation according to modern notions of the number of men that would be necessary to defend such a work would fix the garrison at 5,000. And from the little that is known of Roman occupation of this part of the country, it seems unlikely they should themselves have erected a work of such magnitude, although they may doubtless have occupied it in small force in after years.

2ndly. Considerations of the supply of water and fuel are, in these camps, invariably sacrificed to the necessity the people appear to have been under of occupying the strongest features of the country. I did not meet with a single example in Sussex of a fort having a supply of water within the inclosure, and the majority, like Cissbury, are at a considerable distance from a spring. Nor could fuel have been obtainable anywhere in their immediate vicinity.

This, according to Vegetius, was a primary requisite in the selection of a Roman camp: "Castra autem, praesertim hoste vicino, tuto semper facienda sunt loco, ubi et lignorum, et pabuli, et aquae suppetat copia."[a] Accordingly we find amongst those camps which are of undoubted Roman construction, many of which have been figured by General Roy, no instance of the neglect of these principles. The Roman camp, if it does not actually inclose a spring within its outline, is always in the immediate vicinity of water, and in some places the strength of the camp appears to have been sacrificed with a view to secure a supply of this necessary commodity; as for example in the Roman camp of Birrenswork Hill in Annandale, figured in plate xvi. of General Roy's work, where the rampart is completely commanded within 100 yards, but incloses a good spring.

3rdly. The strength of the ramparts in the Sussex forts corresponds inversely to the natural strength of the position. In some places where a steep declivity presents itself, there is no rampart, implying that the defence of those places must have been confined to an *abatis*, or a stockade. I am not aware of this being a recognised feature in Roman camps, although their ramparts were also strengthened by stockades.

4thly. The ditch, generally on the outside, was sometimes in the interior of the work.

[a] Vegetius, lib. i. c. xviii.

5thly. Outworks were thrown up upon commanding sites within 200 or 300 yards of the main work.

6thly. The ramparts at the gateways were increased in height, and were sometimes thrown back so as to form a re-entering angle, and thus obtain a cross fire upon the causeway over the ditch. This is not the characteristic of a Roman gateway.

7thly. The gateways were sometimes covered on the outside by circular erections having intervals between. Those of the Romans were covered either by a simple traverse, or a semicircular demilune. Notwithstanding this however, I am inclined to think, from fragments of Roman tiles which I discovered during excavations in the body of two of these circular outworks at Chanktonbury, that they may have been subsequent additions during the Roman era.

8thly. The inhabitants in the interior were located in pits. This was not the practice of the Romans, but is known to have been the custom of the ancient Britons.

9thly and chiefly. The interior surface of the majority of these forts is strewed with flint flakes of artificial manufacture, and the excavations which I have made in them, so far as they go, have resulted in bringing to light a large number of flint implements, all without exception of the chipped and unpolished kind and unaccompanied with any trace whatever of metal.

This is in itself sufficient to betoken a pre-Roman origin. As however the evidence conecting these implements with the erection of the intrenchments, and a more detailed account of the excavations in several of the works, will form the subject of a future paper, I think it better to postpone the consideration of this subject for the present.

One more point remains to be considered in regard to the connection which it has been supposed these works had with each other in the general defence of the country.

Mr. Turner, supposing that the several intrenchments formed a connected series for the protection of the hill district, divides the forts into three lines of defence. Those on the northern margin of the downs, including Heyshot, Chanktonbury, the Devil's Dike, Wolstanbury, Ditchling, and Mount Caburn, he considers to form the northern chain. The southern, or coast line, he considers to be formed by the Broil near Chichester, Burpham near Arundel, Highdown, Cissbury. White Hawk Hill near Brighton, Newhaven, Seaford, and Beltout; while the central or intermediate line, connecting the other two, he supposes to consist of Chilgrove, Bowhill, St. Roche's Hill, and Hollingbury.

The position of the gateways of these works he also seems to think affords evidence of connection for defensive purposes. "Those of the northern line are to the south, east, and west. Those of the southern line to the north, east, and west, while those of the intermediate line differ in all."

There does not however appear to me to be anything, either in the position of the gateways or of the works themselves, that is incompatible with the hypothesis of their having been isolated works, erected by several distinct tribes as a protection against the incursions of their neighbours. Such a state of society is more in accordance with what we find to be the early condition of savage life in every part of the world. We know that in the time of Cæsar the several tribes of the Gauls and Britons were always at war with each other until they united to repel his attacks; and the lower we descend in the scale of civilization the more invariably we find that races were split into tribes and families, living side by side in a condition of perpetual hostility.

The highest summits of the downs, as I have already mentioned, are those of the northern ridge; and here therefore we might naturally expect to find the strongholds of the several tribes of the early Britons, to whom a strong defensive position and an extensive view, giving timely notice of a hostile incursion, must have been an absolute necessity of existence. In like manner the line of the sea-coast would afford the best positions of defence for the inhabitants of the maritime district. Three out of four of the coast works have had their sea-faces destroyed, so as to render it now impossible to determine whether entrances formerly existed on those sides. It is however natural to suppose that, whether situated on the northern or southern margin of the downs, the entrances would be constructed on those sides which afforded the most easy access to the place. The flat ridges of the downs were the great thoroughfares in those days, and the gateways would therefore usually be placed in the direction of those ridges. This we find to be unmistakeably the case at Mount Caburn, Chanctonbury, and Cissbury.

The existence of large intervening estuaries which, as I have already noticed, formerly separated the groups of hills is also opposed to the notion of a connected system of defence. Each group of hills, it will be seen, had a stronghold of its own, intended, no doubt, to contain the inhabitants of the surrounding district, who dwelt in the valleys beneath, where fuel and water was obtainable, where traces of their cultivation still exist, and who, like the savages of Africa and many other parts of the world, resorted to their stronghold in times of danger, each man carrying with him fuel, water, and provisions sufficient to sustain him during the short duration of a predatory attack.

It is in this feature of isolation that the Sussex camps differ so materially from the intrenchments of the Yorkshire wolds, where we see unmistakeable traces of the landing and subsequent operations of a united people, extending for miles into the interior of the country.

The earthworks of the south of England on the contrary, though far superior in a military point of view to the Lis and Rath of the Irish, resemble them in the evidence they afford of numerous distinct and independent tribes, and lead us rather to infer the existence of frequent intestine wars, in which each section of the community fortified itself against the attacks of its immediate neighbours, than of any extensive and combined system of national defence.

IV.—*Further Remarks on the Hill Forts of Sussex: being an Account of Excavations in the Forts at Cissbury and Highdown.* *By Colonel* Augustus Henry Lane Fox, *F.S.A.*

Read March 5th, 1868.

In a paper which I had the honour of reading to this Society on the 6th February 1868 I gave a general description of the ancient earthworks of the downs between Beachy Head and Chichester, and I concluded by expressing an opinion, derived chiefly from a consideration of the principles of castrametation, outline, and other indications observable on the surface, that these intrenchments belonged to the Ancient British period, and were not, as some writers have supposed, the work of the Roman invaders of this country.

I shall perhaps be excused if I very briefly recapitulate some of the leading points upon which I then based my conclusions. They were as follows:—

First. The size and outline of these intrenchments are regulated by the size and outline of the hills upon which they stand; that is to say, the whole hill top, or the whole available portion of it, appears to have been fortified by a line of rampart drawn along the brow, in the position best suited for defence, and with but slight regard to the amount of space inclosed within its circuit; whereas the Roman practice was to regulate the outline and arrangement of the camps in accordance with the strength of the force intended to occupy them, and with a chief regard to the considerations of discipline and interior economy.

2ndly. They occupy invariably the highest summits of the hills, in positions frequently remote from fuel and water, points which were considered of the first importance in selecting the site of a Roman camp.

3rdly. They are of greater extent, and in greater number, than would warrant us in attributing them to the Romans, judging from the little that is known of the Roman occupation of this part of the country.

4thly. The inhabitants in the interior of these works frequently dwelt in pits, which was not the Roman practice.

5thly. The defensive arrangements of the gateways are not in accordance with the Roman plan.

6thly. These intrenchments are in an especial manner associated with evidence of the manufacture of flint implements found scattered in great abundance upon the surface; and the very staunchest upholder of the hypothesis of Roman origin will be compelled at once to admit that the Romans did not employ that material in the construction of their tools and weapons.

As the nature of the relics discovered in a work of this kind appears to afford the most reliable source of evidence of the race and condition of the people by whom it was erected, I determined to make a series of excavations, in order to determine whether the indications of the stone age observable on the surface corresponded with those of the implements found in the soil; and if so, whether the positions in which these implements were found were such as to afford evidence of their having belonged to the people who constructed these forts.

Cissbury, on account of its magnitude, the existence of pits in the interior, the great quantity of flakes on the surface, and the notice which it has attracted in times past, appeared to me the best work upon which to commence operations; and I therefore applied for permission to dig, to Captain Wisden, the owner of the property, who not only afforded me every facility, and himself took much interest in the prosecution of the work, but also, with much liberality, placed at my disposal all the relics of antiquity that I found in the place, and who is therefore himself entitled to a considerable share of whatever credit may be due to the exploration of this interesting locality.

The first mention of Cissbury by any antiquary of note, is by Camden, in his Britannia.[a] "Near it," he says, speaking of Offington, "is a military fortification, surrounded with a rude bank of earth, where the inhabitants believe Cæsar incamped; but its name Cissbury plainly bespeaks it the work of Cissa, second Saxon king of these parts, after his father Ella, when he landed with his brother Cimen, and a considerable body of Saxons at Cimen shore, so called from Cimen, which has now lost its name, but appears by King Cidwalla's grant of it to the church of Selsey to have been near Wittering." Rapin in his History of England[b]

[a] Camden, by Gough, 1789, i. 188.

[b] Rapin's *History of England*, i. 59.

follows the opinion of Camden, attributing both this place and Chichester to Cissa, whose name they take.[a]

A plan and section of this incampment is given in Cartwright's "Parochial Topography of the Rape of Bramber," vol. ii. part ii. with the following description of it: "At the northern extremity of the parish of Broadwater, on the Offington estate, is Cissbury, an ancient incampment, surrounded by a single vallum, following the course of the hill, and inclosing within its area sixty acres. The origin of this incampment must be referred to the remotest times, and is lost in impenetrable obscurity." The author continues—"That a situation, including the crown of a hill, and commanding an uninterrupted view over an open country, should have been occupied as a military station, in almost every successive period of our history, is highly probable. Within the area on the west side there are deep indentations, which have the appearance of the site of rude huts; this circumstance, and the appearance of burnt bones and fragments of vessels of unbaked clay, are considered as indications of British origin. The discovery of Roman coins is a sufficient evidence of its being used as a Roman station; and its occupancy by the Saxons may be presumed from the probability of its present name, *Cissbury*, having been derived from Cissa, a Saxon general."

The same views are expressed in "An Historical and Descriptive Account of the Coast of Sussex," by J. D. Parry, M.A.

In 1831 it is described by Mr. Mark Antony Lower, in his Historical and Topographical Description of Sussex, as "a remarkable hill three miles from Steyning, and four from the sea, on which is an ancient circular or oval earthwork defended by a double trench. Vulgar tradition derives its name from Cæsar, of whose camp they pretend to show the site; but it is without doubt a Saxon fortification, and this is proved by some of our oldest historians, who say that, after the battle fought at Mercreadesburn, in the year 472, they founded this place for their defence, giving it the name of Cissa's burg, from Cissa the son of Ella, afterwards king of Sussex, which name in the course of time became corrupted into Cissbury."

Mr. Turner[b] enters at some length into the origin of Cissbury, and concludes

[a] This is also in accordance with the opinion of Camden, who says, in the *Britannia*, i. 185—Gough's edition—"Chichester, in British, Caer Cei; in Saxon, Cissan Ceaster; in Latin, Cicestria; is a tolerably large city, walled round, built by, and named after, Cissa, the second Saxon prince of that province. Cissanceaster means nothing more than the City of Cissa." If, however, Caer Cei was the British name for this place, it does not appear quite evident why it should be necessary to introduce the name of Cissa in order to form Chichester.

[b] *Sussex Archæological Collections*, vol. iii.

by assigning it to the Britons. He also discusses the object of the pits on the west side, and rejects the idea which at first sight suggests itself, that they were used as reservoirs, on account of their having been excavated in the chalk hill; but he comes to a conclusion, which I confess does not appear to me warranted by any evidence adduced, viz., that they were "dish barrows, holy consecrated recesses, formed for the especial purpose of forwarding the celebration of the religious ceremonies of the Britons during their sojourn in these hill forts."

Mr. Turner appears to have convinced himself of the subsequent presence of the Romans in this incampment, alleging in support of this opinion:—

First. That to the east it was *apparently* connected by a road, "a *considerable portion* of which is now to be seen," with the Roman Station discovered in the year 1828 upon Lancing Hill. But in the absence of a more detailed account of this way, we ought not, I think, to take it for granted that it originally communicated with Cissbury, especially as no present trace of such a connection exists, and the only roads which now lead from the east of Cissbury run, one possibly in the direction of the ancient well at Leech Pool, mentioned in my former paper, and the other certainly to the springs at Broadwater.

The second point adduced by Mr. Turner is the discovery of Roman pottery in the garden and paddock of Mr. Wyatt at the foot of Cissbury Hill, and also the existence of terraces on the slope to the south of the fort upon a spot traditionally called The Vineyard, and in a situation particularly well adapted for the cultivation of the vine, which the Romans are supposed to have been the first to introduce into this country. But the presence of Roman pottery in the neighbourhood of the fort, which is also undoubtedly the neighbourhood of a Roman villa, is no absolute proof of the Roman occupation of the fort itself; and the Vineyard is precisely similar in every respect to the terraced inclosures, which, as I have mentioned on a previous occasion, exist in many other places to the eastward, on the southern slopes of the downs.

If therefore the Roman occupation of Cissbury rested solely upon the evidence brought forward in the paper under consideration, however probable in itself such a circumstance may be regarded, it could not, I think, upon such evidence be considered as *proved*, nor I presume does the author himself think that it could.

Mr. Irving, whose paper, referred to in my former communication, was published in the Journal of the Archæological Association,[a] is the first who attributed the *construction* of Cissbury to the Romans, and, as his opinion is based

[a] Vol. xiii.

upon the evidence of excavations conducted by himself, it is on that account especially deserving of consideration. Mr. Irving, comparing the Cissbury group of forts with others that he had examined in Lanarkshire, believes them to form a connected system of defence, of which Cissbury is the central and principal work.

Chanktonbury on the north, Highdown on the south-west, and Lancing Hill on the east, he considers to have formed the outposts of Cissbury. But, at the very outset, much might be said against this assumption; for in the first place Chanktonbury, as mentioned in my former paper, has outposts of its own, thrown up partly in the direction of Cissbury. At Lancing, although there are traces of a Roman villa and of dikes upon the hill, I could see no evidence, during a certainly somewhat cursory examination that I made of the ground, of a military station having been established there; and the intrenchment at Highdown, I shall subsequently show reason for supposing, was of a different period from that of Cissbury, and belonged to the age of bronze weapons.

Mr. Irving opened four pits in Highdown, from which he obtained numerous articles of various ages, consisting chiefly of charcoal, bones, pottery, iron nails, tobacco pipes, and other remains, many of which were of modern date. He then excavated two pits near Offington Mill, about a mile to the south-west of Cissbury, from which he obtained implements of iron, with bones, and fragments of pottery; and he subsequently opened nine pits in the interior, and apparently to the south-east of Cissbury intrenchment, of the contents of which he gives the following account:—

"The opening of No. 1 was found to be exceedingly difficult, owing to its contents consisting almost entirely of a collection of large pebbles washed down from the sides; the operation moreover produced nothing but a halfpenny of William III.

"Nos. 5 and 6 presented the same character of soil, and were consecutively drawn blank. In No. 7 the soil was of a softer nature, and the excavation, as at Offington Mill, produced a trace of wood charcoal, a quantity of oyster-shells, and fragments of bones and pottery, but *no iron antiquities*."

It would appear from Mr. Irving's paper, that, viewing the several intrenchments in this neighbourhood as part of a connected series, he submitted the various articles found in them for identification to Mr. Syer Cuming *en masse*, or at any rate it is evident from the report quoted in the paper and headed "Antiquities from Cissbury and Highdown Camps, Sussex,"* that Mr. Cuming pronounced upon them collectively, and we are therefore unable to draw from the

* *Journal of the Archæological Association*, xiii. 291.

opinion thus given, the distinctive differences of the several articles discovered in Cissbury, Offington, and Highdown, which it is important to keep in view. But from the account which Mr. Irving himself gives of the Cissbury excavation, we may derive conclusive evidence that no trace of metal was found there, and, with the exception of a few fragments of pottery found in only one of the pits, no vestige of anything that could by any possibility be attributed to Roman occupation.

The foregoing brief summary of the opinions of former writers comprehends, I believe, the whole of the information respecting Cissbury which can be collected up to the present time. And it certainly does, at first sight, appear remarkable, that in the mass of commentary and speculation to which I have adverted, not one syllable should have been said respecting the flint implements, of the existence of which in such great numbers, even on the surface of the ground, such abundant evidence is now upon the table before you,[a] and from the presence of which we derive the most incontestable and undoubted proof of the ancient British origin of this intrenchment. The oversight must without doubt be attributed to their having been disregarded amongst the innumerable blocks and natural fragments of flint with which the soil and surface of the downs are everywhere covered throughout this district. The flint implements, at the time of their fabrication, were of course of the natural dark colour of the interior of a block of flint. But in the course of ages their surface has become whitened by decomposition, so as to resemble, to the unpractised eye, the outer coating of a flint nodule, and thus render it extremely probable that the distinctive differences between them should be overlooked by any one who was not especially on the watch for the traces of human workmanship in this material, and prepared by previous examination of worked flints from other localities to distinguish the artificial from the natural forms.

The truth of this observation showed itself very clearly during the course of the excavations, in the great difficulty which was at first experienced in getting the workmen to notice the artificially formed flints as they fell from the shovel, notwithstanding that all of them had passed their lives in digging in a chalk district; but after having been properly instructed, they became as quick as the most experienced amongst us in detecting these flints.

When we find, by a paper lately read to this Society by Dr. Thurnam, that so acute an observer as Sir Richard Colt Hoare habitually disregarded flint implements of the rudest kind, and that many undoubted specimens of flint manufac-

[a] The present communication was accompanied by an exhibition of a number of flint implements from the localities in question, several of the most characteristic specimens of which will be found engraved in Plate VIII.

ture were found by Dr. Thurnam in tumuli that had been previously opened by this distinguished antiquary, we must not attribute it to negligence on the part of our predecessors, or to any remarkable perspicacity of our own, that we should discover what they have omitted to notice, but rather attribute the progress of discovery in these matters to those pre-historic archæologists who during the last ten years have done so much to enlighten us on the subject of the stone age of mankind, and who by their publications have enabled us to apply to the study of these antiquities the knowledge of the period in which we live.

The pits to which I first turned my attention are about fifty in number, and situated, as mentioned in my former communication, on the western slope of the hill, within the rampart; they are of all sizes, hardly any two being of exactly the same dimensions. The smallest are only distinguishable by an almost imperceptible depression on the surface: the largest, situated chiefly on the northern extremity of the cluster, average 70 feet in diameter by about 12 feet in depth: one only is of much larger dimensions. The depth is always proportioned to the diameter. The earth obtained from the pits had been thrown up by the constructors to the west, *i. e.* towards the slope, of course the most convenient side for the excavators. Thirty pits in all were opened during the two visits that I paid to the spot—the first in September, 1867, and the latter in January of the present year. The first two pits opened are shown in the section (Plate VII. fig. 16), in which may be seen their position in reference to the rampart beneath.

The first pit (No. 1, fig. 16) was selected on account of the numerous flakes lying on the surface upon its margin, and it produced some of the best specimens of chipped celts discovered during the excavations. It was 22 feet in diameter, and 6 feet in depth to the bottom; in this bottom a trench 3 feet deep was dug in red clay, the only clay found anywhere in the place. A few fragments of charcoal and some burnt flint occurred at a depth of 2 feet; and the chalk floor, upon which lay a part of the shed antler of a red deer, was reached at 3 feet, and showed a concave bottom. Several well-chipped celts and some ruder implements were found in the clay. Eleven fragments of rude, imperfectly baked pottery, none of them exceeding an inch in length, lay with the charcoal at 2 feet from the surface in this pit.

No. 2, below No. 1, was then opened by means of a cutting 5 feet wide, and produced the following remains: — two lower molars of a small horse at 1 ft. 6 in.; a tooth and part of the horn core of a goat at 2 ft.; part of the tusk of a boar and a metacarpus of *Bos longifrons*; several oyster and snail shells,

a number of rudely worked flints of large size, and a quantity of flakes, none of which however showed traces of secondary chipping. The chalk floor was attained at from two to three feet from the surface, and, like the last pit, was of concave form.

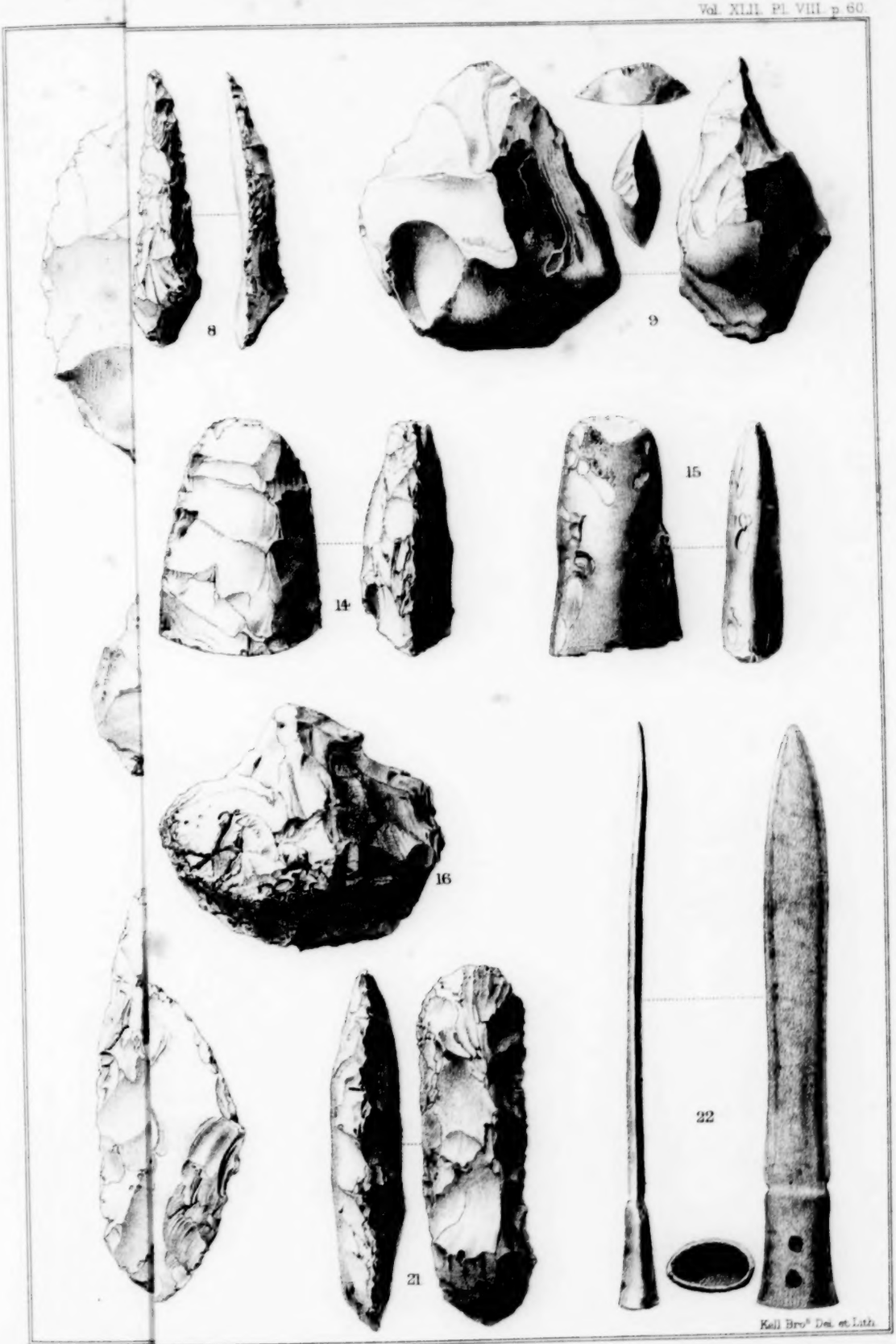
No. 3, to the north-east of No. 2, was opened in the centre. At 1 ft. 6 in. a layer of about 150 snail shells was found; they were collected in one spot as if deposited in a heap and compressed by the weight of the superincumbent soil. The natural chalk bottom was attained at 3 feet, and, like the former, it was basin-shaped. No worked flints, charcoal, or pottery were found here, and, being unproductive, the pit was abandoned.

No. 4, a section of which was taken east and west, was the nearest pit to the east of No. 2 and south of No. 3. Ten small fragments of pottery were found in this pit at 1 ft. 6 in. from the surface; charcoal at 3 ft.; at 4 ft. a layer of burnt flints 3 ft. 8 in. in diameter, covered by a layer of charcoal, showed evident signs of having been a fire-place; above the charcoal were discovered several bones of animals, including part of the *humerus* of a ruminant, probably a small species of *Bos*, the metatarsus of *Bos longifrons*, and a portion of the *scapula* of a goat. One well-chipped celt, another approaching in form to the drift-type, being thick and rough at one end and pointed at the other (see fig. 10, Plate VIII.), and three rough and apparently unfinished implements were taken from this pit. In this pit was also found an artificially formed disc of chalk $3\frac{1}{2}$ inches in diameter, and from an inch to an inch and a quarter thick, the use of which I am unable to conjecture.

Passing for the present over Nos. 5 and 6, which were in another part of the intrenchment, No. 7 was opened to the east of No. 1, and produced two small fragments of pottery at 1 foot from the surface, three lower molars of the *Bos longifrons* and a fragment of pottery at 2 feet, a few fragments of charcoal, and the original chalk bottom at 3 feet. From this pit I took a flint flake showing marks of secondary chipping on the edge, the first of this description as yet found; but no implements of the larger kind.

No. 8 produced no relics of any kind.

No. 9, bearing West 20° North of No. 2, at 23 paces from the centre, was commenced in September 1867, and continued in January 1868. In it were found two good specimens of the long thin celt, well chipped (see fig. 18), and two hammers or pounders (see fig. 16, Plate VIII.), used and worked flakes, and several other implements, which will be described in detail hereafter. The stratification of the

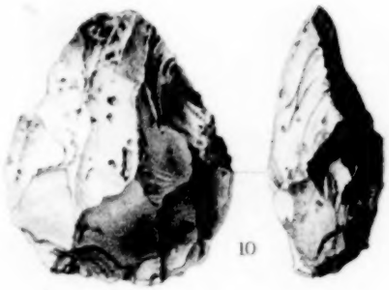
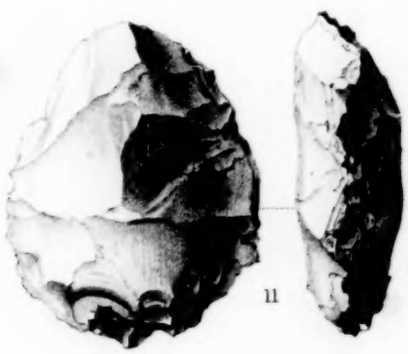


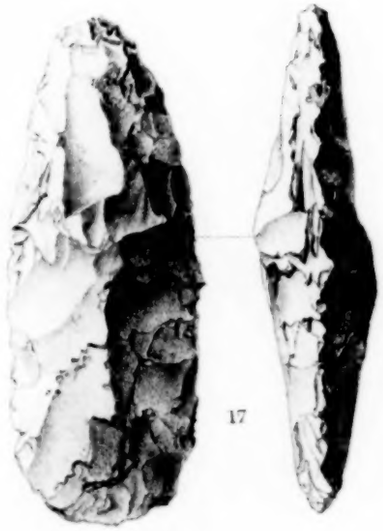
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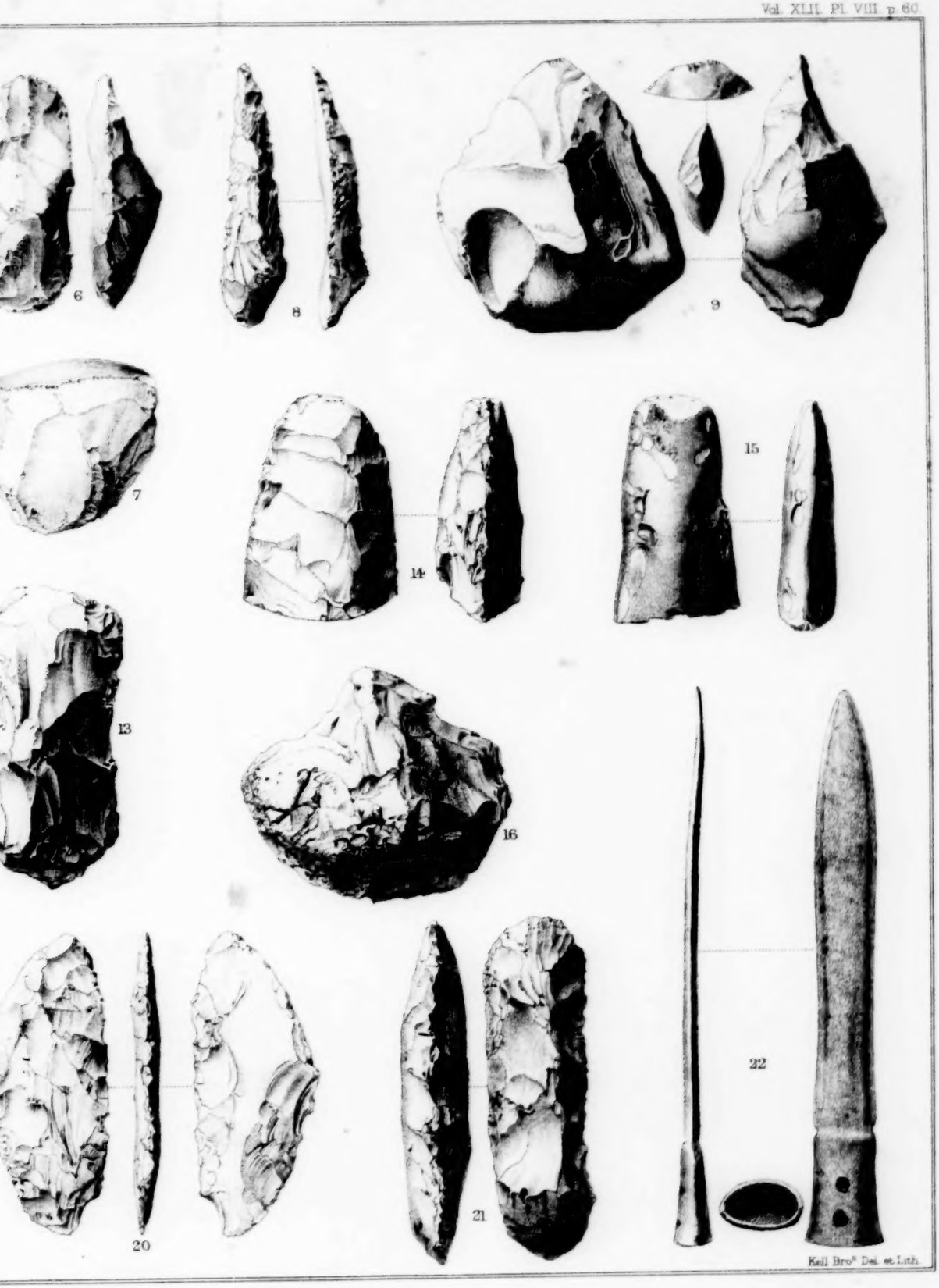







FLINT IMPLEMENTS FROM CISSBURY AND BRONZE KN

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NZE KNIFE FROM HIGHDOWN, SUSSEX.

...es of London, 1869.

deposit consisted of one foot of mould at top, 2 feet of chalk rubble, and the original basin-shaped chalk floor at 3 feet. A piece of red deer's horn was found at 2 feet, but no other bones, charcoal, or pottery.

No. 10 bore S. 20° W. of No. 9, and proved very productive. It was entirely dug out. It consisted, first, of about 6 or 8 inches of large flint nodules, collected on the surface in the centre of the pit. It was amongst these natural flint nodules that the greater part of the worked flints occurred in *all* the pits, showing that they must probably have been deposited originally on the margins of the pits with the other large stones, and have been washed or have fallen during subsequent ages into the bottoms. Beneath the layer of large flints there was about a foot of mould throughout the interior basin of the pit, mixed with natural and worked flints, and beneath this again a layer of chalk rubble full of small flakes, but containing few large stones and implements. This layer extended to the margins of the pits. The depth of the chalk floor beneath the present bottom averaged 3 feet in the larger pits, and was invariably basin-shaped, the superficial deposits above it tapering out on all sides towards the margins of the pits. The ridges between the pits were entirely denuded of soil, though often covered with small flakes. As a general rule the flakes were found near the sides of the interior hollow, the larger stones having fallen to the bottom.

It proved throughout the excavations that the worked flints almost invariably accompanied the unworked blocks, so that when searching for implements we ultimately became guided by this circumstance, and found it useless to dig in those places where no large flints met the pick within a short distance of the surface. This remark however applies chiefly to the flint implements of the larger and ruder kind, as some of the best specimens in my collection were discovered in pit No. 1 in a deposit of red clay, and in some of the shallower pits afterwards excavated. The evidence on this point is barely sufficient to build upon, but so far as it goes it might perhaps be taken to show that the more perfect specimens were taken away from the place of manufacture, and the *débris* only, consisting of unfinished tools or finished implements of the rougher kind, left on the place of fabrication. Upon this subject however I had rather not venture a decided opinion, as much might be said in favour of an opposite conclusion.

Besides the flints, several oyster-shells and fragments of charcoal were found in this pit at one foot in the mould, also the metatarsal bone of a *Bos longifrons* split lengthwise, the two halves lying together, fitting each other,—rather a singular circumstance, as the fracture is evidently of ancient date, and if split for the purpose of extracting the marrow, the motive usually ascribed to the

splitting of bones in this fashion, the halves would probably have lain apart from each other.

No. 11 was some distance to the west of No. 10, and very much resembled it in the character of its deposits, consisting of large flint stones and mould at the top containing several of the larger class of implements, beneath which was about three feet of blue and white marl, including a large number of unworked flakes, but none of the larger implements. Some of these flakes retained to a great extent their original dark blue colour, while the implements in the mould above them had been completely whitened by the decomposition of their surface. Fragments of charcoal were found at 4 feet, a piece of red deer's antler at the same depth, and the chalk bottom at 5 feet 7 inches; the deposits in this case being of greater thickness than in any of the other pits.

No. 13 was one of the shallow pits, the bottom being only depressed 3 feet beneath the margin. It produced charcoal at 4 feet, and at the same depth a quantity of very small shells (*Cyclostoma elegans*), heaped together with pieces of burnt flint and burnt chalk. Several large flat flints of a kind that might very probably have been used to form a fire-place were found together at this depth, much burnt and accompanied with charcoal. Very few worked flints were discovered in this pit.

The remaining pits presented but few characteristic differences from those already described. A large number of worked implements, including some very perfectly chipped celts were found, with a fragment of stag's horn, in No. 23, one of the shallow pits. I also excavated a piece of ground in a hollow, between two of the mounds formed by the materials from the pits, into which a quantity of flint stones appeared to have been rolled or washed down by the rain, but which did not appear to have ever been a pit. Amongst these were two implements of the celt type, thereby completing the evidence that these collections of implements with other stones had been formed in the course of ages succeeding the first formation of the hollows, by the accumulation of loose materials that had originally been strewed upon the surface of the basins in which they are found.

This completes the account of the excavations of the pits in the group represented on the plan, on the western slope of the hill within the Cissbury intrenchment.

It now remains to describe the excavations conducted in other parts of this work.

In rear of the southern entrance, and as if intended to command that opening, at 42 paces from it, is an oblong inclosure (E, Plate VI., fig. 14) 17 paces by 9, consisting of a small parapet not more than 2 feet high at present, with a small

ditch on the outside, and at the south-east corner a pit somewhat similar to those already described, but smaller. In this, a trench 10 feet square was dug to a depth of 7 feet without reaching the bottom. It produced remains of the horse, kid, and *Bos longifrons* in greater abundance than in any of the preceding pits. These animal remains were associated with oyster, cockle, and mussel shells, fragments of baked pottery, some of which were rudely scored in a cross pattern and marked with the impress of the fingers, and one piece of red tile scored in parallel zigzag lines, of undoubted Roman manufacture. This tile affords the first and solitary example of Roman handiwork found during the excavations in Cissbury. Not a trace of flint manufacture or flakes of any description was noticed in this pit, and the remains may therefore be regarded as affording some confirmation of a conjecture which from the outline and situation of this structure had already been formed respecting it, viz: that it is of later formation than the intrenchment and the other pits to the west end, and may very possibly belong to the Roman period.

The next cutting took place in a nearly similar work, marked F on the plan, placed, apparently with the same object, in rear of the northern entrance. Many small fragments of pottery were found on the surface in this place, which, although in such minute fragments as to make them difficult to identify, yet from their texture appeared to be Roman, and one piece was perforated with a number of small holes, as if forming part of a colander. No pottery however was found in the cutting, nor any trace of flints; and, as the chalk was reached immediately beneath the surface, the exploration of this place was abandoned, and the workmen sent to dig in the adjoining work, marked G.

This, like the two last-mentioned works, was of oblong form, consisting of a small parapet with a ditch on the outside, the sides being 44 and 23 paces respectively. The whole of the northern ditch of this work was cleared out, and found to be a foot and a half in depth; it produced several flint implements of the celt type. A slight depression in the interior of this inclosure was also excavated, and led to the discovery of one chipped implement and a fragment of a polished celt (fig. 15, Plate VIII.) at one foot from the surface; this being the only vestige of a *polished* tool discovered in Cissbury. No pottery was found in this place, which circumstance, coupled with the occurrence of flint implements, and its close proximity to the before-mentioned work F of the same form in which pottery was strewed upon the surface and no flints were found, leads to the supposition that the two works may not belong to the same period; and the question

at the same time arises whether the polished implement found in this place does not belong to a later day than those discovered in the pits.

The fabrication of polished implements has been held by Sir John Lubbock to distinguish what he terms the "Neolithic" from the Palæolithic age. But, as flint implements must have been chipped into form before they were polished, are we to consider the discovery of a single fragment of polished work as a sufficient indication that the whole belonged to the Neolithic age? or are we to regard this polished specimen, found one foot from the surface in a separate part of the fort and in a work of different form, as a proof that it belonged to a later date than those occurring in the pits? Are we to consider the whole as representing a transition period, passing from the Palæolithic to the Neolithic age? or, is the distinction of *chipped* and *polished* implements inapplicable as a test of age to the particular locality and district that we are considering?

Before approaching this question it will be necessary to describe the implements, to classify them according to the several uses for which they appear to have been formed, and thus if possible to determine whether they belong to an early or a late type.

In the five-and-twenty pits, the excavation of which I personally superintended, I procured, exclusive of flakes, 350 flints, the majority of a very rough description, but all showing unmistakeable signs of human workmanship. Including those which fell into other hands, I imagine that the pits must have produced in all from 550 to 600 worked flints of one sort or another, all *chipped* and without the slightest trace of *grinding* or *polish*, nor was any vestige of metal discovered in the place.[a]

The flints may be first arranged under two principal heads, viz., flake forms and core forms; the first embracing those tools which were formed out of the flake chipped off from the core, and the second those fashioned out of the core itself.

Amongst the flake forms now upon the table we may distinguish—

1st. Outside flakes. The first flakes detached from the flint block.

[a] One fragment of iron, 7 inches in length, 1½ in width, and $\frac{1}{8}$th of an inch thick, was found close to the surface of one of the pits. On submitting it to Dr. Percy for examination, he pronounced it to be charcoal iron, and, therefore, probably of ancient origin. Its position, however, within a foot of the surface, implies that it may probably have dropped into the pit in comparatively recent times, and may therefore be classed with the surface pottery, some of which was undoubtedly Roman. Considering the extent of the excavations, it is a matter of surprise that so little of recent origin should have turned up in the soil.

2ndly. Flakes with one mid-rib at the back. Some few of these resemble the flakes often found in Ireland and elsewhere, especially at Toome on Lough Neagh, discovered by Mr. John Evans, and described by him in the forty-first volume of the Archæologia, and which are there supposed to have been used as lance-heads; but the forms which might have served for such a purpose are extremely rare in Cissbury.

3rdly. Flakes with two or more ribs at the back. The process of forming all these three descriptions of flakes has been frequently described, and they are universal in all localities where traces of flint manufacture have been discovered.

4thly. Flakes *used*, but not *worked*. Marks of use as tools are shown by the worn and jagged edges. The simple unworked flake was the sharpest and one of the most effective instruments for many purposes that the savage possessed. In working bone they were used with a sawing or scraping motion.

5thly. Worked flints. These include several varieties. 1. Flakes chipped on one edge only, and apparently intended to be used as knives (fig. 3, Plate VIII.) 2. Flakes chipped to a point at one end to be used as picks or piercers of some kind, and the other end left rough to be held in the hand or inserted in a handle. Of these I obtained nine specimens, some of which were worked only on the outer or ribbed face, and others on both faces (fig. 8, Plate VIII.) 3. Scrapers, chipped to a bevel at the end opposite the bulb, and on the outer face only, the inner or flat surface being left untouched (fig. 2, Plate VIII.) These were extremely rare. I obtained only two decided scrapers, one from the surface: and I think that not more than four were found in all. I have however picked up such scrapers elsewhere on the surface of the Sussex downs; and Mr. Evans has been kind enough to give me several which he found upon the surface near Seaford. The small number discovered in the Cissbury pits is remarkable, as their use in the stone age appears to have been almost universal. Some few have been found in the drift, and they are common in the French caves of the reindeer period. They are the most abundant implements found on the Yorkshire wolds; and also occur, though less frequently, in Ireland, Denmark, Sweden, and Switzerland. They are still in use by the Esquimaux, who mount them in bone handles for dressing skins. 4. Flakes chipped to an edge at one end, slightly rounded, such as might very possibly have been used for skinning animals. Of these I obtained five specimens. They differ from the scrapers only in being bevelled to a more acute angle at the edge; some are slightly worked on the flat side as well. Nearly similar implements, but larger, are included amongst the core forms (see figs. 12

and 13, Plate VIII.)* 5. Implements worked like the last at *both* ends, untouched, or nearly so, on the flat face, and bevelled all round on the other (fig. 6, Plate VIII.) I have two of this description of implement.

6thly. Drills, chipped to a long taper point at one end, and left flat at the other, so as to be held in the hand. Two drills, one a very perfect specimen, were found in the course of the diggings; but I was not fortunate enough to obtain a specimen of this class. Drills of the same kind are found upon the Yorkshire wolds.

7thly. Flakes worked on both faces. Of these the specimen given in fig. 19, Plate VIII. might possibly have been used as a spear-head, the upper part being adapted to fit into a handle. Fig. 20, Plate VIII., closely resembles some of the knives that are found in Denmark. The lower end of this implement is left rough, as if for insertion into a handle; the surface of one of the sides is much glazed.

Amongst the core forms I would draw particular attention—

1st. to a class of implement of very early type which has not, I believe, hitherto been noticed in any of the flint implements later than the caves of the reindeer period: they are chipped to an edge on one side only, the other being either left with the natural surface of the flint, or intentionally rounded to be held in the hand, (fig. 1, Plate VIII.) They so exactly resemble some of the flints found in the Le Moustier cave, in France, examples of which are in the Christy Collection, that I cannot do better than quote the description of these implements given in the *Reliquiæ Aquitanicæ* and apply it to those found in Cissbury; it is as follows:—"The specimens" (given in pl. v. of the *Reliquiæ Aquitanicæ*) "belong to a type of implements especially adapted to be held in the hand by the thick and naturally rounded margin, whilst the opposite margin, reduced to a sharp curved edge by careful chipping, can be used as a hatchet or chopper, and seem well fitted for smashing the marrow bones which are found amongst the hearth stuff in great profusion." Several of the edges of those found in Cissbury, like those of Le Moustier, were jagged and broken, (see fig. 7, which is a similar kind of implement,) showing that they had actually been in use for this or similar purposes, and that they must therefore be regarded as finished tools, and not as celts abandoned in the process of formation. One or two specimens more carefully formed than the others serve to show clearly the intention of the fabricators; but I obtained thirty-nine others, all of which fit the right hand precisely in the same way, and of these, eleven show by their blunted edges that

* The other sides of the implements represented in figs. 12 and 13 are flat.

they have been in use, whilst the remainder found in the same deposits, and equally liable to abrasion, if the abrasion resulted from their having been knocked about in the pits, showed edges as clean as on the day they were fabricated.

2ndly. The next type resembles the former in having a natural surface left for the hand at one end, the other being chipped to a point or an edge. One very perfect specimen of this class is on the table (fig. 9, Plate VIII.): the edge has been formed by broad, shallow facets, taken off with great skill on either side, so as to produce an even-pointed blade five inches in length; and at one place, at the point, where the blade thus formed diverged to one side, following the conchoidal fracture of one of the facets, it has been brought back nearly into the right line by four minute and careful chips. Nothing can be more obvious than the intention of the fabricator in the construction of this implement, which, from the outline of the original flint, could never have been intended to have been formed into a celt, and must therefore be looked upon as a finished tool. From the fineness of the edge it must have been intended for work in some softer material than flint or bone.

3rdly. The next form to be discussed consists of implements chipped on all sides, broad and *thick* at one end, and chipped to a point or a narrow-rounded edge at the other (figs. 10 and 11, Plate VIII). These closely resemble, if indeed they are not fac-similes of, some of the implements found in the drift. Some two or three of the specimens found here might pass in any collection of drift implements as belonging to that age. They pass by imperceptible gradations into—

4thly. The celt type, common in the surface period of this country, and in all parts of the world (figs. 17 and 18, Plate VIII.), broad and sharp at one end, and pointed at the other. Some of these were no doubt fabricated for use as axes, but others of an extremely pointed and narrow form (as, for example, fig. 18, Plate VIII.) may, I think, have been intended to be used with the pointed end, as spear-heads. Nothing else was found in Cissbury which could, with any degree of likelihood, be attributed to this purpose, and it seems very improbable that in an intrenchment of this kind, constructed obviously for warlike purposes, the spear-head form should have been totally unknown. Amongst the celt forms, one with a shoulder or knob upon one face near the middle (fig. 17, Plate VIII.) appears to be peculiar to Cissbury. Such a shoulder may have been intended as a stop to prevent the axe-head from splitting the handle. Another having a small shoulder all round was discovered during the excavations. It may, perhaps, be doubted whether these knobs do not represent merely the *residuum* of the flint core that had not yet been flaked off in the manufacture, but, upon the whole, I am inclined

to think they were intentional. A large proportion of the implements of the celt type are undoubtedly in an unfinished condition. Fig. 21, Plate VIII., is a variety of the celt type of unusual form, having nearly parallel sides and rounded ends.

5thly. A great number of the finished celts appear to have been broken in use, probably at the place where they fitted into the handle (fig. 14, Plate VIII.); one of these I found embedded in the roadway at one of the entrances to the fort. These may be distinguished by the fracture from wedges of nearly the same shape that appear to have been intentionally constructed in that form, and may have been used either as wedges, chisels, or for the purpose of skinning animals. Some of these I think were intended to be held in the hand, a rough end adapted to that purpose having been left on the opposite side (figs. 12 and 13, Plate VIII.).

Both the broken celts and the formed wedges occur in Denmark. They are also found in great numbers at Spienne near Mons; the general character of the flints from which place appears greatly to resemble the Cissbury type, as will appear from my specimens from Spienne. They differ however in one important particular. In many of the Spienne specimens, like those from Pressigny, in France, the cores appear to have received a preliminary dressing, for the purpose of obtaining long flakes, such as might be used as daggers or knives, but no such dressed cores or long flakes occur in Cissbury, where the cores appear all to have been themselves worked into the form of tools.

6thly. We now come to pounders (fig. 16, Plate VIII.); intended to be held in the hand on one side, and greatly bruised by use on the other. These may very probably have been used in the manufacture of the flints. Some are long, others nearly round. They pass gradually into

7thly. Flint balls (fig. 5, Plate VIII.), chipped all round, the object of which is obscure. It has been suggested they may have been used as sling or throw stones. Similar forms to these are found in Yorkshire, Ireland, Denmark, and elsewhere; specimens from which places are upon the table.[a]

All the foregoing types are represented in perfection by some two or three specimens of each, which, by the care bestowed on them, serve to show the intention of their constructors; but between these there are, as there always will be in any large collection of early implements, innumerable intermediate links, uniting the whole together, and making it impossible to draw any broad line of demarcation between them.

It will be seen that Cissbury has produced specimens of nearly every type

[a] All the flint implements figured in Plate VIII., with the exception of fig. 20, have been presented to the Christy Collection.

known to have been found amongst flint implements from the drift, and cave, up to the surface period.

I am aware that this assertion will meet with objectors: first, amongst some of those who, not having made flint implements their study, are not prepared to see, in the great majority of the rough implements now exhibited, any particular indications of purpose or design. And, secondly, it may perhaps be received with some doubt by others, deeply studied in such matters, who, without having sufficiently carefully examined the characteristic peculiarities of this particular find, have already decided in their own minds, from broad induction, that implements of the very early types here described are not to be found amongst the relics of the comparatively recent period to which Cissbury must be ascribed. But we must believe the evidence of our senses before we subscribe to theories, however plausible or however generally true.

That a large proportion of the flint forms found in this place consisted of refuse cores, half formed and abandoned in the process of manufacture, such as we might naturally expect to find in a great flint arsenal, which this appears to have been, is readily admitted. But this need not prevent us from distinguishing amongst them the several distinct types towards which the fabricators appear to have been working at the time these implements were abandoned, on account perhaps of some flaw in the flint, or a false stroke in the construction. The chipped *celt* (figs. 17 and 18, Plate VII.) we must at least allow to be, in so far as form is concerned, a finished tool. Numbers of these were found in the pits, mixed with implements of the other forms above described, and no one who examines the surfaces of some of them with an experienced eye can doubt for a moment that the care bestowed on them denotes as great a degree of perfection in the art of flint chipping as has ever been attained, at least in this country. Are we then to believe that the savages of this place had only one idea of a tool, and that all the rougher forms are celts, more or less brought to completion? and if not, why should we reject, as finished tools, those forms which show clear evidence of design, which closely resemble forms that in other places are admitted to be tools, and which, by the fracture of their edges, show that they have been in use after fabrication?

Nor can I admit that it is at all unlikely or contrary to the experience derived from a study of the habits of savages in other parts of the world, that in a large manufactory such as this, we should find amongst the implements in use many of those types which during prior ages have been employed by the races from whom the fabricators descended.

The subject of continuity of form in the implements of aborigines of different

countries is one to which I have devoted some attention during the last fifteen years, and a collection which I have formed of objects obtained from various parts of the world has been arranged expressly with the object of illustrating the universality of this principle.

It is a maxim capable of wide demonstration that what we recognise under the term *invention* is absolutely unknown to savages in a very early condition of art. The process of analogy which in the complex civilization of modern times enables us to apply to one branch of industry the discoveries which are made in another, and which contributes so materially to extend the steps of progress as almost to obliterate all trace of the continuity that would otherwise be seen, is totally beyond the reach of savages, who creep on from form to form by slow and almost imperceptible stages, extending over vast periods of time, guided only by the ever-varying forms of the materials of wood, stone, bone, or obsidian in which they work.

Further, it may be observed that, as in the palæontological record, so far as it has yet been determined, many ancient forms are retained during subsequent ages, and still survive amongst others that have sprung from them, so by a precisely similar process of *natural selection*, if we may apply that term, and I think we may, to the earlier stages of human art, many ancient types of tools and forms of ornament are in like manner retained by savages from habit, prejudice, and a variety of causes, long after they have been superseded by others of more modern origin; so that, at any given period of the history of an aboriginal race, the varieties of any particular class of implement actually in use, if fully collected and arranged, will within certain limits exhibit all the links of connection between present and past forms. Notwithstanding the great difficulty of collecting the necessary materials for displaying a connected series of such forms, a difficulty fully equal to that which the geologist experiences in arranging his palæontological sequence, this fundamental maxim is nevertheless capable of clear demonstration in any well-assorted collection of early and savage implements, and embodies, I believe, the pith and marrow of pretty nearly all that can be extracted from the study of pre-historic and comparative archæology. It is more clearly observable in those nations which are lowest in the scale of art; it exists to a greater degree amongst the Australian than amongst the African and Polynesian races, and with these to a greater extent than amongst the Malays, who in their turn show a connection of form in the construction of their implements to a far greater degree than the more civilized nations of Europe and Asia; and yet I do not forget that long before I had begun to study this subject in connection with early races, my attention was drawn to the principle of con-

tinuity, whilst serving on the sub-committee of small arms in 1851, by observing the very slow gradations of progress that were taking place at that time in the military weapons of our own country.

So that I was not at all surprised to find amongst so large a collection of implements of the same period discovered in these pits, every link of connection between earlier and late types. It was precisely what I expected, and what I believe will always be found when a sufficient number of objects of the same age are brought together. And the reason of its not having been sufficiently insisted upon hitherto arises, I believe, from such collections having been so frequently dispersed, instead of being arranged together in a good typical series, and also from the fact that travellers and collectors not properly imbued with this principle have usually brought home, preserved for their museums, those specimens which fall in with a classification predetermined in their own minds, and which serve rather to exhibit well-marked *differences* of form, than those which by their *resemblance* contribute to show the almost imperceptible mutations which connect one form with another.

This, however, is not truly scientific, and I venture to think—at the same time being well aware of the difficulties that stand in the way of such a proposal—that no real progress will be made in pre-historic researches until in the arrangement of our museums, the analytical method has been superseded by one more synthetical, classification by continuity, and until the desire on the part of curators to obtain unique and remarkable specimens, and to arrange them in cases in such a manner as to produce symmetry and please the eye, has been replaced by an arrangement calculated to exhibit at a glance, side by side, in close proximity, all those varieties of the same class of implements, by means of which we shall be enabled to trace out the slow and uninterrupted flow of progress which has taken place in all the early stages of art.

What has been said hitherto relates chiefly to the position of these relics in the sequence of art. It remains to consider their period in order of time. The animal remains which Mr. William Davies of the British Museum has been so kind as to identify for me, consist of: *Cervus Elaphus*, *Bos longifrons*, *Capra hircus*, *Equus* (*sp.?*) and *Sus scrofa;* no trace of fallow deer. The shells are all of existing species;[a] this would not carry the date back to a greater antiquity than the surface period.

Nothing which by any stretch of imagination could be looked upon as an arrow-

[a] Mr. Brice Wright has been kind enough to name the shells found in Cissbury; they consist of the following species, viz.: *Littorina littorea; Cyclostoma elegans; Tapes decussata*, Linn.; *Helix nemoralis*, Linn.

head, such as are found in Yorkshire, Ireland, and Denmark, and which are sometimes associated with bronze weapons, was found in Cissbury. There were very few knives or scrapers; most of the implements were of large size. Although in other parts of Sussex polished stone implements have occasionally been discovered, the majority appear to have been chipped only. The flint implements found lately at Ore, near Hastings, by Dr. J. W. Smart, and figured in the nineteenth volume of the Sussex Archæological Collections, are all chipped, and very much resemble those found in Cissbury. The small collection in the Lewes Museum are mostly chipped celts. We may therefore suppose, either that the inhabitants of this district were much behind-hand in the construction of their implements, or that these implements belonged to a very early period: certainly to the true stone age. If we are to assume that Cissbury was the place in which the implements were worked from the rough flint up to the completion of the chipping progress, and that many of them were afterwards taken away to be polished elsewhere, the division of labour in this respect must certainly have been very complete, as no trace of sandstone, or of any material adapted to grinding purposes, was found in the place.

This being the condition of the works of industry discovered in Cissbury, the question arises, may they have belonged to the soil previous to the existence of the pits, have been turned up in the process of forming them, and subsequently washed back into the bottoms in after years? Such an hypothesis must be rejected, as there is evident trace of the manufacture of the flints on the tops of the mounds formed out of the material thrown up from the pits. In one place a collection of large flakes might be seen, where evidently the first rough outline of a flint implement had been formed. In another place, a quantity of small flakes showed where a celt had been brought to perfection by minute and careful chipping. All this took place on the tops of the mounds, and must therefore have been subsequent to the construction of the pits. Had the flints belonged to the soil, they would have been thrown up in the body of the mounds; but having dug some feet into one of them, I found no trace of flakes, although they were found on the surface of the same mound. They could not therefore have belonged to the soil. Having decided this question, the next point to consider is the object of the pits. That they were not reservoirs, is evident from the fact that no puddling or lining of any kind was found, without which the chalk would not hold water. The basin-shaped bottoms render it very unlikely that, as suggested by Mr. Irving, they were pounds for cattle. The discovery of charcoal in many of the pits, with animal bones and shells, the remains of two fire-places, the number of celts broken in use, and the number of flakes that appear to have been

in use, but which could not have been employed in the flint manufacture, makes it appear extremely probable that at some time or other the pits were used as habitations. But the remains of kitchen-middens are not in sufficient quantity to denote any very long continued occupation.

Besides which, had they been originally constructed as huts, what would have been the necessity for digging the larger ones so deep in the ground; shallow pits of the same diameter would have answered the purpose of habitation equally well. For what use then were they formed? I am inclined to think for the purpose of obtaining flints.

It is said that the flint material is more easily worked when it is first removed from the chalk, and before it becomes hardened by exposure. It would therefore be necessary they should quarry their flints somewhere, and what better position could be selected for such a purpose than on the slope of the hill in the interior of the intrenchment, which exposed position would be less well adapted for habitation than the flat ground above. This would account for the great depth to which some of the pits have been sunk, and I am much confirmed in this opinion by finding that Mr. Evans, from a description given him of the place, had arrived at precisely the same conclusion that I had formed on the spot. That they were afterwards used as habitations, or that the smaller pits were the habitations of flint workers, while they obtained their flints from the larger pits, appears to me to be extremely probable, both on account of the signs of occupation above-mentioned, and also from the evidence of their having employed such pits as habitations in other parts of this district, and indeed in other parts of this same work.

Finally we have to consider the still more interesting question whether the intrenchment was coeval or subsequent to the pits. As mentioned in my previous paper, the pits conform to the line of rampart winding round the hill, and are for the most part confined to the interior; but in one place, on the south side, a few pits of much smaller size are found beyond the ditch. It would therefore appear just possible, though not probable, that the pits might have existed on the hill before the intrenchment, and the rampart have been thrown round them in after years.

Had such been the case, we should probably find no flint implements in the *débris* of the ditch, as the majority of the flints would have been buried in the soil before the rampart was formed, and none would be turned up in the formation of it, except such as might chance to lay upon the place where the ditch was dug. But if the ditch existed before the flint work was carried on, specimens of this manufacture, especially such as may have been used in the defence of the place, would in all probability be found, upon excavation, on the original floor of the

ditch, and they would be confined to the floor of the ditch, because, as the rampart was not the place of manufacture, the surface in that part would not be strewed with flints to the same extent as the pits, and the superficial deposit which filled up the ditch in after years would not therefore contain worked flints to the same extent as that which filled up the pits. We should find in the ditch nothing but what was in use at the time, and that, upon the steep slope of the rampart, would fall down at once into the bottom. Whoever the constructors of the rampart may have been, we should expect to find some trace of their implements on the floor of the ditch.

I therefore caused a trench to be dug 33 feet long and four in width, in that part of the bottom of the ditch which was nearest to the pits. The original bottom was found at 3 feet from the surface; it was 7 feet wide, and had a sloping escarp and counterscarp cut in the solid chalk at a slope of about 45°, as represented in the section (fig. 16, Plate VII.) No trace of pottery or metal, or anything but a few bones, and about five or six flint flakes, were found in the superficial deposit; but on reaching the floor, a few large flint blocks, and amongst these, lying on the chalk bottom, were twelve worked flints, mostly of rough form, but including one of the best celts found in Cissbury. These then must have been the work of the original constructors, and, although it would no doubt have been desirable, had there been time, that a more extended exploration of the ditch should have been made before coming to a conclusion, yet the number of worked flints in so small a distance as 30 feet, and in the position described, appears to me to afford strong presumptive evidence that the intrenchment belongs to the stone age, or at any rate to the age of the flint manufacture.

As regards Roman occupation, a solitary piece of tile and a small fragment of charcoal iron, found close to the surface in one of the pits, are the only possible evidence of it that fell into my hands. Roman burials have however been discovered near the terraces on the south side of the hill, about half-a-mile from the intrenchment, and several good urns from this place and a coin of Antoninus Pius are in Captain Wisden's possession. It therefore appears probable the Romans may have occupied the place, though perhaps in very small force.

A very few words will be sufficient to dispose of the exploration at Highdown. During this excavation I was so fortunate to meet Mr. Ouvry our Treasurer, who visited the digging several times, and was kind enough to assist me by his advice and experience. Permission having been very liberally granted by Mr. Edwin Henty, the owner of the property, I first opened the pit marked No. 1 (Plate VI.

fig. 17), one of those numbered but not explored by Mr. Irving. This pit and No. 5 produced very much the same class of remains which he has described, and appeared to contain a mixture of the productions of all ages.

A slight depression at the foot of the interior slope of the southern rampart was then excavated, and resulted in the discovery of a work that proved of much greater interest. It consisted of an oblong pit, at the foot, and in line with the interior slope, 7 feet 6 inches in length by 3 feet 4 inches broad at the bottom, and 4 feet deep, cut in the solid chalk, with a perfectly smooth floor, and having steps down to it cut in the chalk on all sides, viz., one step on the east and west sides, and two on the north and south. The pit was filled with about one foot of mould at the top and the remainder with chalk rubble, amongst which were bones of all the animals found in Cissbury, and in addition those of the dog—*Canis familiaris*. Quantities of small fragments of British pottery of a coarse, badly-baked quality, but of a superior texture to that of Cissbury, with grains of white quartz in its composition, were also found in the pit, and one or two specimens of a finer texture scored with an angular pattern and lines of punctured dots, at two feet, with several iron nails, probably Roman or Anglo-Saxon; even a few fragments of yellow glazed pottery occurred near the surface.

Towards the south-east corner of the pit, in an upright position, with the point 2 feet 6 inches from the surface, the bronze socket knife or dagger (fig. 22, Plate VIII.) was discovered; and near it a piece of a bone pin. Near the dagger, and apparently resting on one of the steps at the south-east corner of the pit, were several large fragments of an urn, composed of coarse roughly-baked pottery, with grains of quartz in its composition. Some of the pieces were afterwards cemented together, and found to belong to the lower part of an urn, the bottom of which was 4½ inches in diameter; the sides were ½ inch thick; the urn increased in size towards the upper part; no trace of ornamentation was observed on any of the fragments; nor were there any vestiges of burnt bones in connection with the urn. Considering however the vicinity of the dagger and the point of a bone pin, there appears to be grounds for believing that this may have been a funereal deposit. At the north-west corner of the pit, a human skeleton lay extended in a north-west and south-easterly direction, the head being to the north-west; it was extended upon the back, with the head slightly raised and turned to the left, as if resting upon a pillow. The skull is of oval form, probably that of a female: the top of it was 1 foot 7 inches from the surface; the teeth are very much ground down; the hands were crossed upon the pelvis; the thigh bone was 1 foot 6 inches in length; the whole skeleton, from the crown of the head to the

end of the tibia, was 4 feet 11 inches in length. As the grave in which the skeleton lay cut into the sides of the pit, and the skeleton was not extended in a line with the pit, but across one corner of it, I think it quite *possible* it may have been a subsequent interment, and may have had no connection with the pit or the bronze implement. No relics of any kind were found on the body. The skull fell to pieces soon after removal, but the greater part of it has been restored. Another human jaw with several human bones was found near the feet of the former, but in a state of great decay.

Bronze knives resembling the one discovered in Highdown have been found in several places in this country, and in Ireland; but chiefly in Ireland, and they are not common even in that country. One with a short wooden handle, showing it to have been a knife or dagger, and not a spear-head, is preserved in the Museum of the Royal Irish Academy, and is represented in the thirty-sixth volume of the Archæologia, p. 330. Several others are figured in the Illustrated Catalogue of the Royal Irish Academy—Bronze, p. 465. A portion of one from my own collection obtained in Ireland is exhibited; it differs from the Cissbury specimen in having only one rivet hole instead of two. Another was found in Heatheryburn Cave, county Durham, in December, 1861, beneath a layer of stalagmite, together with part of the mould of a socket-celt and a bone pin or awl; it is figured in the Proceedings of the Society of Antiquaries, 2nd series, ii. 130. Another was found at Martlesham, near Woodbridge, Suffolk, with 17 socket-celts; it had a single rivet. Another knife of the same kind was found in Suffolk, with a spear-head, a hammer resembling a socket-celt, one or two socket-celts, a gouge, and an awl of bronze; they were discovered in a gravel pit at Thorndon, and are described in the Journal of the Archæological Institute, x. 3. Two others were found in the Thames, near Wallingford, and are mentioned in the Proceedings of the Society of Antiquaries, 1st Ser. iv. 303.

From the above it will be seen that knives of this description have usually been discovered in connection with *socketed* celts, and may therefore be attributed to a late period in the bronze age. No worked flints, and only two or three rather doubtful specimens of flint flakes, were found in Highdown, and this circumstance, coupled with the discovery of a bronze weapon, justifies us in ascribing a later date to Highdown than to the intrenchment at Cissbury. However probable therefore it may appear that these works were occupied simultaneously in after years, we cannot suppose them to have been of contemporaneous origin, or that they were erected with a view of establishing a connected system of defence.

V.—*Some Account of a Visitation of the Royal Chapel of St. George at Windsor, in* 1552. *By the Reverend* GEORGE FYLER TOWNSEND, *M.A.*

Read January 30th, 1868.

IT has often been the occasion of remark that out of the enormous mass of jewels, ornaments, and substantial church plate accumulated in almost illimitable profusion in the ancient religious houses of our land so few specimens have descended to modern times. This paper will deal with this subject, and will show the manner of the disappearance of these treasures. It will give a series of documents (hitherto inedited, but unique in their complete connection and fulness) relating to a Visitation conducted by the King's Commissioners in the Chapel of St. George, Windsor, and illustrating these three points: (*a*) the wealth of these religious foundations; (*b*) the manner in which that wealth (in respect to the valuable moveables) was dealt with by its proprietors during the progress of the Reformation; and (*c*) the ultimate fate of the jewels, plate, ornaments, and vessels of gold and silver. The various documents are somewhat lengthy, and contain some repetitions. It has, however, been deemed expedient to give them as they appear, for two reasons: first, as providing an example of the exact mode of conducting one of these ancient Visitations; and next, as exhibiting, in their curious variety of expression, the diversity of sentiment and feelings prevalent in those days.

In the year 1552, the sixth year of Edward VI. rumours were widely reported of extensive peculations and alienations of property effected by the Dean and Chapter of the Royal Chapel of St. George, in the Castle of Windsor. These rumours attracted the attention of the Privy Council, who in the month of July issued a Royal Commission to conduct a Visitation of the College. The persons nominated on the Commission were William Parr, Marquis of Northampton, Sir Philip Hoby and Sir Maurice Berkeley, knights, Thomas Weldon and John Norris, esquires. The following was their paper of instructions:—

AN INSTRUCTION for the Lord Marquis of Northampton, S^r^ Philip Hoby, knight, and S^r^ Maurice Barkley, Mr. Thomas Weldon, and Mr. Jhon Norris, Esquiers, the King's Ma^tes^ Commissioners, touching Churche Gooddes at Windsor:—

First how manie dividentes have bine made sins Mr. Heines cam first thither.

Item Hartopp the Goldsmith and others resorting to Mr. Robins.

Item Germin rode to warne the masters that be abrode the thirde day of this moonethe.

Item the sextons Laken and Ingram, let them be examined.

Item Jhonson of S^te^ Anthonies delivered them in plate above c^li^ besides copes and other thinges.

Item Mastres Heines burned copes.

Item Mr. Aglianby sold copes to Mr. Wffms.

Item Mr. Cole sold copes to John Hake for xx^li^.

Item the same Hake brought him an other merchaunt, unto whom the said Cole shewed mo, but would not let the said Hake see them.

Item to know whether thei had enie thing from Mr. Jhon Shornes or from enie other of their churches elles.

Item to let them bring in their bookes of accomptes and olde inventories of Jewells, of plate, of Reliques, of Copes, albes, vestmentes, Arras clothes, Carpettes under foote, hanginges of Alters, Alter clothes, Corporas cases, staves plated for the crosses in procession, the plume upon S^nt^ Georges helmet, the lampe of silver, the latin desk and gradū Chori, the palles of herses, namely, of King Henry the vij and King Edward iiij^th^. beside the palle of Henry theyght, whether thei kepe length and breadth, the organes and pipes, the plates of copper upon the graves, the spoile of the Chapell plucked doune in the College, King Edwardes cappe of maintenaunce, the sworde and girdle of perle and stone, the Duke of Suffolkes sword.

Item thei have devided emonge them selves, in balles of wexe everie one for his share as hath chaunsed to them, The leases of all fermes and personages belonging to this house, and all other the Coppiehold landes in prevencion of all leases that shall hereafter be made for this c. yeers.

Item what become of all the plate and gooddes of both the Commons, and for the lands which be excepted out of the dissolving of College and Chauntreis and such like, wherfor thei be the Kinges, and within the compasse of the said Statute.[a]

The Marquis of Northampton took no personal part in the conduct of this inquiry. Sir Philip Hoby,[b] who from personal motives would have a peculiar satisfaction in discharging the duties entrusted to his care, was the President of the Commission. He and his colleagues met at Windsor on Saturday the 16th of

[a] Additional MS. B. M. 5498, fo. 42. All these documents will be found in this MS. except where they are otherwise referred to. The contractions have been extended, and the modern distinction of "u" and "v" observed; otherwise the spelling has been retained.

[b] Sir Philip Hoby had been himself in peril at Windsor from an accusation brought against him by Stephen Gardiner, Bp. of Winchester.—Foxe's *Acts and Monuments*, 2nd Edition, v. 464—480. Strype's *Eccl. Memorials*, ii. pt. ii. 53.

July, as appears from the Canons' letter printed below, page 84. He gives in this letter to Sir William Cecil an account of what took place on this occasion :—

Sir,—After my right hartie commendacions. On Saturdaie (weke) last past I was at Windesor with the rest of the Commissioners, where we colde do but litle good, partlie bicause we lacked the Certificat made by the Deane there and other of the M^rs (Masters), which being one of our principal things to procede upon, was delyvered upp in to the Courte, and cam not to our hands till the same Saturdaye verie late in the night; and partlie for that the Deane was at that present, as we were credibly enformed, very extreme sick, so as he colde not be ther, and likewise certein of the M^rs of the Colledge were absent also. But the viii. daie of this moneth we have appointed to mete there again, and given streight commaundment that bothe the Deane and all the M^rs be there present at the said daie limited without fayling in any wise, at which time we trust (God willing) we shall at the furthest so advertise our procedings therein, as shall be to the contentacion of my Lords of the Counsaile, which we earnestlie wyshe, and therunto have and will endeavour ourselves as mete is to thuttermost. Nevertheless, hitherto they of the College have been very untoward to come to the confessing of the things missing oute of the same. Wherefore, lest our advertissement in that behalfe shulde seem to my Lords of the Counsail very long in coming, I most humblie praye you to enforme their Lordshipps of theis premisses being th'occasion therof, and to extend y^r furtherance therin if they shuld chaunse to fall upon the same. M^r Barkeley being a man most mete to be at Windesor at the daye appointed for our meting there, and that I have bine th'occasion of his tarrying there till this time by my persuasions for that purpose, the rather for that M^r Throgrton is come to the Courte, I praye you to beare w^t hym therin, and that he maye have commaundment from thens to be at Windesor at the daye limited, as one in dede that cannot be spared. Thus I besech the Lyving Lord long to preserve you in helth and prosperitie. From the Tower the ffirst of August.

Y^rs assuredly, PHELIP HOBY.[a]

Sir Philip Hoby, as it appears from the evidence of this letter, and of that from the Canons to the Marquis of Northampton, which will be found below, remained at Windsor from Saturday the sixteenth of July till the twenty-third of that month. During that interval he was not idle, but carried on with spirit the purposes of the Commission. The fruits of his efforts are to be traced in the following Inventory, and in the annexed statement from the Dean and Chapter presented to him, in spite of their "untowardness," on the twenty-first of July, 1552.

THE INVENTORIE.

In the Vestrie within the Churche.

Inprimis a Chalice with patenn, all gilt	lxvii oz.
Item an other Chalice with patenn, all gilt	xxv oz.
Item an other Chalice with patenn, all gilt	xxii oz.
Item ij great Basons, all gilt	clxxx oz.
Item ij of the greatest Candelstickes, all gilt	ccxlviii oz.
Item ij litle candelstickes, all gilt	liii oz.

[a] State Papers, Domestic Series, vol. xiv. No. 55.

Item ij other great candelstickes, all gilt . . . . . cl oz.
Item ij other great candelstickes, percell gilt . . . . lxx oz.
Item ij Censors, wherof one all gilt . . . . . cvi oz.
Item a monster, all gilt . . . . . clxxx oz.
Item a Crosse, all gilt . . . . . xxxvi oz.
Item a pair of Cruettes, all gilt . . . . . xv oz.
Item ij pair of other cruettes . . . . . xv oz.
Item a square Olgate stone garnished with silver, unwaied.
Item vii Rector Staves tipped with silver, wherof iiij have but one knopp at the ende.

Copes and Vestmentes within the Vestrie in the Churche.

Inprimis a Cope of white damaske orfrased with read clothe of Tissew, with a chisible and ij tunicles of white bawdekin orfrased with read tissew.
Item a Cope of white damaske embrodred with Aungels, with a Chisible and ij tunicles of damaske embrodred with flowers.
Item a Cope of Blewe vellet orfrased with nedlewoorke imagerie, with the chisible and ij tunicles.
Item a Cope of Read vellet upon vellet with floure of golde orfrased with nedlewoorke, with a chisible and ij Tunicles of the same.
Item a Cope of crimson vellet embrodred with floures orphrased with blew vellet, with a chisible and ij Tunicles.
Item a Cope of blew vellet embrodered with Aungells displaied, with a chisible and ij Tunicles of the same.
Item a Cope of Clothe of silver orfrased with Clothe of golde, with a chisible and ij Tunicles of the same.
Item an Alter clothe of blew vellet embrodered with roses.
Item a Chisible with ij tunicles of read vellet, orfrased with greene.

In the Vestrie without the Churche.

Item ij Copes of needle woorke sett with pearles.
Item v Copes of blew clothe of Tissew orfrased with needle woorke, and xviij other Copes of blew clothe of Tissew orfrased with read Tissew.
Item vi Copes of read clothe of Tissew orfrased with needle woorke, and xii other copes of read clothe of Tissew orfrased with blew Tissew.
Item vi Copes of black cloth of Tissew.
Item a Chisible and ij Tunicles of the best read clothe of Tissew orfrased with needle woorke.
Item a Chisible and ij Tunicles of the second read cloth of Tissew orfrased with woorse needlework.
Item a Chisible and ij Tunicles of white cloth of Tissew orfrased with nedle woork.
Item a Chisible and ij Tunicles of blew cloth of Tissew orfrased with needle woork.
Item a Chisible and ij Tunicles of purple cloth of Tissew orfrased with needle woork.
Item a Chisible and ij Tunicles of Tinsell saten orfrased with needle woork.
Item the hanginges of read cloth of Tissew and blew sarcenet, ij peeces embrodred for the upper part of the quier behinde the hygh Alter.
Item ij peeces of Read baudkin for hanging of the quier in sommer.
Item ij Hersclothes of black cloth of Tissew.

Item one Hersecloth of golde lined with satin.
Item a palle or canapie to bear over the Kinge.
Item ij hanginges for the Deanes stalle one of Tissew and an other of figurie vellet.
Item a Canapie that hangeth over the high Alter.
Item iiij Cousshins of blew figurie vellet.
Item ij Cousshins of Read cloth of Tissew.
Item ij Cousshins of blew Tissew.
Item ij Cousshins of black Tissew.
Item j Cousshin of white Tissew.
Item ij Cousshins for the Deanes stall dailie, one of white vellet and an other of blew damaske.

Item an Alter clothe of needle woork, conteining the lief and martirdome of S^{t} George.
Item an Alter cloth of Read vellet embrodered.
Item a front of read vellet with gold floures and images of perle golde and garters.
Item a front of black Tissew.
Item the coate Armour and banner of King Henry theight.

Jewelles in the Erarie.

First a pix of golde with perl and stone.
Item a pax of golde with thimage of our Lady.
Item a pax of golde with thimage of Christ rising out of the sepulchre.
Item a tablet of golde with thimage of the Trinitie.
Item a tablet of golde sett with diamondes.
Item Crewettes of biyrrals.
Item a litle Crosse standing upon a Cusshin.
Item S^{t} Georges head with a helmet.
Item a great Image of our Lady.
Item the foote of the Crosse.

The "helme, plume, and head of S^{t} George" mentioned in this inventory and in the subsequent answers of the Prebendaries remind one of a legacy left to the College at Windsor by the will of King Henry VII. dated March 31, 1509: "Also we give and bequeath to Almighty God, o^{r} Lady, and S^{nt} George w^{t}in o^{r} Colledge of Windesore y^{t} now be, and y^{t} herafter shall be, for a perpetuall memorie ther to remaigne while the world shall endure, and to be set upon the high aulter of the said Colledge at y^{e} daies of solempne fests, and such other tymes as y^{e} Deane and Chanon of our s^{d} College shall think convenient and honerable, a grete ymage of S^{nt} George of gold p$\tilde{o}$ȝ cclx u$\tilde{n}$ces, garnisshed with rubies, perles, saphires, diamands, and other stones, the which ymage is now in our juell house.[a]"

The following explanations were also presented by the Dean and Chapter during the residence of Sir Philip Hoby and of his colleague Sir Maurice Berkeley at Windsor:—

[a] Sloane MSS. 4847, folio 101. This will was printed by Mr. Astle. London, 1775.

THE EXCESSIVE CHARGE OF THE COLLEGE OF WINDESOR WHICH ENFORSED THE DEANE AND CHAPTER THERE TO SELL CERTAINE PLATE AND JEWELLES FOR THE NECESSARIE DEFRAING OF THE SAID CHARGES.

A Certificat and Accompt of the College for the Sale of Plate, and how it was bestowed.

Imprimis, for the building of the Castell walle before Mr. Wllms house and westward at the commaundment of the King's Majestie that dead is, which we borowed of Mr. Chomb' and was not paid before the first yeere of the reigne of o^r^ Soveraign Lord the King that now is . clxx^li^

Also for like building of the Castell wall of Mr. Mallettes house, Mr. Heines, and Mr. Arches made in the iij yeere of the reigne of o^r^ said Souveraigne Lord that now is . . . . . cxxviii^li^ xv^s^ vii^d^

Also for taking doune the Alters, leveling and paving of the ground, and for peinting of the East end where the high alter was, and where King Edward the fourth lieth . . . . xx^li^ xvii^s^ v^d^ ob.

Also the Deane and Chapter hath bine burdned w^t^ the Tenthe and subsidies of the clerkes, vergers, bellringers, sextons, quiristers, and other officers and ministers of the College, which yerlie receive emong them cclxix^li^ vj^s^ vii^d^, wherof the Deane and Chapter hath none allowance nor deduction at the taxation of the colleges Revenues for first frutes and tenthes, that is to say, for the tenth of the xxxvi, xxxvij, and xxxviij of our said late souveraigne Lord lxxx^li^ xv^s^ x^d^ ob. And for the subsidies vij yeeres, that is to say, for xxxvi, xxxvij, and xxxviij yeeres of our said late souveraign Lord, and for the ij, iij, iiij, and v^th^ yeeres of our soveraigne Lord the Kinges Majestie that now is clxix^li^ xiii^s^ iij^d^. In the wholl . . . . ccl^li^ ix^s^ i^d^ ob.

Also wheras o^r^ late soveraigne Lord King Henry theight had certain landes of this college in exchaunging to the yeerly value of cxl^li^, we had no land in recompense therof by the space of a yeere and a half. And although we had afterward recompence, yet the College was not able to forbeare the said somme in the meane time, wherupon we sold plate to the said valor of . . . . . cxl^li^

Also the College was not able to pay all men their duties betwixt michelmas and Christmas before order was taken in the Kinges Majesties visitacion that the new Steward shoulde receive without enie diminucion the wholl Revenues of this College due and paiable at Michelmas. And to thentent the College might be reduced into this good order, and also that cc^li^ might remaine moreover in the Treasurie for the necessarie affaires thereof (whereof c^li^ was lost the last yeere by the fall of monei), certain plate was solde to the valor of . . vij ^c li^

Also for fournishing of tenn demilaunces sent w^t^ the King's Majestie to Bolloine at the College charges . . . . cxl^li^

Also for the conveing of water in pipes of lead to the Deane and Canons houses and for cesterns of lead for keaping of water nightlie against casualtie of fier, beside wood and sowder . . . lxviij^{li}

Also the charges of two visitacions of the Kinges Majestie were likewise borne of such plate sold to the valor of . . . c^{li} xviij s. iij^{d}

Also by the fall of monei the last yeere the College lost as appereth by the Treasurer's booke . . . . . ccxlvj^{li} xii s. i^{d} ob.

All which plate we the Deane and Chapter aforsaid did sell by common assent for the necessarie causes of the College above testifyed, knowinge none other owners of the said plate and gooddes moveable of this College but only the Deane and Chapter.

And in the third yeere of our souveraign Lord the Kinges Majestie that now is we the Deane and Chapter made partition of certain copes and ornamentes, leaving the best still in the College, as we thought it lefull for us to do, both bicause the gooddes are oures, and also bicause the use of such thinges were abolished by the King's Majestie godlie proceadinges, and finallie because the thinges did dailie decay for lack of occupying.

Concerning the Sapphires and a Balist that were in certain capsis of golde, thei were divided by common assent of them that were ther present, everie man having one. As for litle sparkes of emorades, bicause thei wer thinges of smalle price to our estimacion thei which sold the plate never made us reckoning of them, nor we ever demaunded enie money for them.

The Summ of the charges of the College of Windsor for causes above specified . . . . m. ix^{c}lxv ^{li} iij^{s} i^{d} ob.

THE CERTIFICAT MADE THE XXIST DAY OF JULY IN THE VITH YEERE OF THE REIGNE OF O^{R} SOUVERAIGNE LORD KING EDW. VI^{T} OF ALL PLATE AND JEWELLES SOLD BY THE DEANE AND CHAPTER OF THE KING'S MAJESTIES FREE CHAPELL OR COLLEGE WTHIN THE CASTELL OF WINDSOR, FROM THE MOONETH OF MARCH IN THE XXXVI YEERE OF THE REIGNE OF O^{R} LATE SOUVERAIGNE LORD KING HENRY TH'EIGHT UNTO THE DAY ABOVE SPECIFIED.

The first yeere of the reigne of our souvereign Lord King Edward the vi. Mr. W^{m}s, Mr. Barker, and Mr. Mallet solde by the common assent of the Deane and Chapter certain plate gold and silver, we know not to whom, to the somme of fyve hundreth fortie and seven poundes and eleven shillinges.

Also the second yeere of the Reigne of o^{r} said souveraigne Lord King Edward vi^{t} Mr. Heines and Mr. Barker, by like consent of the Deane and Chapter, did sell a pix of gold, and a pair of beades of golde, amounting to the Somme of ccxiiij^{li} xvi s. to whom the said Mr. Heines certeinly knoweth not, but trusted Mr. Barker with the sale thereof, but as he supposeth to Wigg the Goldsmith.

Also the third yeere of the reigne of our said souvereine Lord King Edward the sixt, Mr. Heines and Mr. Arche by like consent sold certain procession crosses, basons, candelstickes, Sensors, chalices, and ij smalle images, of o^{r} Lady the one, and the other of S^{t} George, w^{t} other small percelles, to the value of cccclxvij^{li} xii^{d}, sold to Wigg and Dickson, goldsmithes.

Also in the fift yere of our said soveraigne Lord King Edward vi. Mr. Cox by like consent solde the chalice of gold to Dickson the Goldsmith for the somme of cclx^{li}.

The somme of the plate sold by the Deane and Chapter for cause above specified . . . . . M.iiii^{c}lxxxix^{li}. viii^{s}.

Copy of a Letter sent to My Lord Marquis by the Canons.

After our humble commendacions to your good Lordshipp. Theis are to signifie trulie unto the same that before the Commissioners did sit here the xvith day of this present July, we did never know of enie commaundment given unto us, or restraint made by Mr. Henley for selling enie of our Church plate, Jewelles, or gooddes, which commaundment or restraint if we had knowen (although the Deane and Chapter here be owners of such plate and gooddes, as we are able to prove by our Statutes under the broade Seale of Englande), yet, for obedience sake, we wold have absteined from sale of such thinges until we had declared to the King's Majestie and his honorable Counsell the great urgent causes which appeareth by a book now sent from the Deane and Chapter to y^{r} L. that we had to sell them: and therupon had made our most humble suit to have his Majesties license so to do. Beseeching your honourable L. therfor to be a meane to the King's Majestie and his most honorable Counsell that our former doinges may be taken in good parte, considering we know none other but the gooddes be oures: our ignoraunce of the said commaundment or restraint, the chargeable time that hath bine theis ix or x yeres past, and that this College (thanked be God and the King's Majestie) is yet left welthie in plate, Jewelles, copes, able to sustein like burdens herafter if anie such shall happen, as appeareth by the last Inventorie, now taken by Sir Philip Hoby and other Commissioners. And thus, &c.

In the following month, on Monday the 8th of August, Sir Philip Hoby was again at Windsor according to his appointment with the Prebendaries. His earnest entreaty to his friend Sir William Cecil had not been successful, and Sir Maurice Berkeley was absent The only person (mentioned in the Commission) present besides himself was Mr. Thomas Weldon. On this occasion the Dean and each of the Prebendaries presented, both singly and collectively, their answers, bills, or certificates to the questions inquired of them by the Commissioners. They afford an excellent example of the replies furnished by other Chapters and Colleges on similar Visitations.

It may be desirable to make a remark on the "Inventorie" made in the time of Henry VIII., and so frequently alluded to in these documents. We find no copy of it in the volume whence our extracts are taken, and it is not to be found in the Records of the Court of Augmentation. In a Certificate, No. 30, for the County of Berks, there is an account of a Visitation held for the College of St. George's, Windsor, by Sir John Welleborne, Knight, Walter Hendley, Esquyer, (probably the Mr. Henley referred to in the letter just given,) Richard Worsley, Esquyer, and others, in which the answer relating to

the moveables is given in these words: "Ornaments, plate, Juells, goods, and cattells merly apperteynyng to the said Colledge ys as yt apperythe by th'inventorie therof made, not praysed." This Chapel of St. George was expressly exempted from the operation of the Statute, and it is probable that the Inventory was made, but not returned to the Court, nor enrolled. The Master Heines so frequently referred to in these successive certificates, was the celebrated Simon Heines, Dean of Exeter and Prebendary of Westminster. He took a leading part in promoting the Reformation. He died in the latter part of this year 1552.[a] Mr. Barker, whose name occurs as an active promoter of these proceedings, was already dead. Owen Oglethorpe, it may be mentioned, succeeded William Frankelyn as Dean shortly after the accession of Queen Mary to the throne. In explanation of the title "Master of S^nt^ Anthony's" in these certificates, it must be mentioned that Edward IV. had granted to the Dean and Chapter of Windsor the advowson of the house, hospital, and free Chapel of St. Anthony, London, and that it was usual for one of the Canons to be appointed Master.[b]

Copie of the Deanes Letter to the Commissioners.

Pleaseth it your right Honorable Worshippes to be advertised. That yesternight being the viii of August I received your letters, for aunswer wherunto as touching Copes, vestmentes, and other ornamentes, there was nothing in my time to my knowledge solde, alienated, devided, or put away untill the visitacion kept in the ij^d^ year of the reigne of our soveraign Lord the Kinges Majestie now beinge. And as concerning plate and other Jewelles, if there were more sold then was in the booke latlie sent to my L. Marques, it was done without my knowlege, as it mouyht be for me, for theis xij yeeres last past I never escaped such extreame sickness for the most part of everie yeare that I was constrained to absent myself from Windesore to recover my helth, leaving behind at all times my keies and booke of Statutes with the elder Canon then being Resident according to the Statutes of the College. I was never present at waing or selling of anie of the plate or Jewelles, or do I know to whom enie part thereof was sold, or for how muche, but only upon reaport of them that sold it, whose names be comprised in the letter sent to the L. Marques. Also all such Copes and other thinges as have bine allowed unto me be still wholly remaininge in my house at Windesore without minishing by the value of a grote.

Mr Heines, being Steward and M^r^ of S^t^ Anthonies in London in the time of our late Soverain Lord King Henry th'eight, sould certain plate of that house, but of what valeu or to whom I know not; he can tell best himselfe. Mr. Anthony Barker likewise, being there M^r^, sold plate to the value of xx^li^ as he said, and devided Copes and divers other thinge without enie consent, or knowlege, and sent vnto my house ij ill Copes with a vestment of blacke worstead, all to deare of x^s^, readie to be shewed. And as I have latlie heard, Mr. Cocks had from thens a rich cope of Tissew. Also Mr.

[a] See Strype, *Eccl. Mon.* ii. pt. ii. 52. Cooper, *Athenæ Cantabrigienses*, i. 111, 542.

[b] See Tighe's *Hist. of Windsor*, i. 379; and see Letters Patent, dated Feb. 27, 14 E. IV. printed in the *Monasticon*.

Arche, latlie being M^{r} and Steward there, sold iiij belles for xl^{li} or there about, as he said, unto whom I know not. I saw ij saphires and a few other smalle stones, and pearles of litle valew, as I think, which you shall see at my cõming to Windesor, where they have remained, and yet do, with all other thinges which I received at enie time sins my first coming thither. What other men have I know not, for alwais in mine absence they mouyht do what it pleased them for me, and did. Theis viij weekes I have bine continuallie sore troubled w^{t} coughe and other diseases, and have slept as litle as enie man colde. By reason wherof my head and all my bodie is verie farr out of temper, wherfore I besech you to give me respect to call the premisses better to remembraunce. And as I can get further knowleage I shall God willing advertise you, ever now submitting myself to the King's Majesties pleasure, and his most honorable Counsell. And thus the holie ghost have you in his blessed tuition. From my house at Chalfount the ixth of August.

Yours assured at commaundment,

WILL'M FRANKLIN, DEANE.

To the Right Honorable S^{r} Philip Hoby and S^{r} Maurice Barkley, knightes, and other the Kinges Maj^{tes} Commissioners.

The copie of Letters of the Deane and Canons to my L. Marques.

In our right humble wise we cõmend us to your good Lordshipp, certifying the same that the honorable Sir Phelip Hoby knight, and S^{r} Maurice Barkley knyght, with Mr. Norris and Mr. Weldon, Commissioners appointed with your Lordshipp by the King's Majestie for the Survey of Churches plate, Jewelles, Copes, and belles, hath bine here at the Kinges Majesties free Chapell or College within the hy Castell of Windsore the xvi day of July, and by vertue of their Commission have taken an Inventorie of all our plate, Jewelles, Copes, vestmentes, and other ornamentes now remaining in this College, as appeareth by the same Inventorie indented betweene them and us. And whereas thei find lackinge certein plate, Jewelles, and ornaments which were comprised in a former inventorie taken by Mr. Henley and other in the xxxvjth yeare of our late Soveraigne Lord King Henry viij., thei have required us to make aunswer to your Honorable Lordshipp, upon what causes the said plate, Jewelles, and ornamentes were alienated, and to whome, and for what valew the same were solde, and by whom; we therfor, for the accomplishment of their request herin, do here plainlie and trulie (so farr as we can call to our remembraunce, or can come to knowlege of the truthe by divers bills of sale, and testimonie of the Goldsmithes handes) declare all the premisses to your honorable L. as is conteined in a book therof made therwithall sent unto your L. First, we certifie your L. for verie truth, as we all be readie to depose upon our othes, that at time of the said alienacõns we did then think that the Deane and Chapter of this College were (as we yet think ourselves we are) verie owners of all gooddes of this College both moveable and unmoveable, by whom so ever the same gooddes have bine given, or herafter shalbe given to this College, and so we doubt not but your L. and all the Lordes of the Kinges most honorable Counsell will think and judge, when ye have read and considered the statutes and ordinaunces of this College made by the founder therof, which we have to shewe under the broade Seale of England. A true copy wherof (so much as perteineth to the purpose) we send here unto your Honb^{l} L. Also whereas by some persons it is reaported, and informacion given to the L. of the Kinges most Honorable Counsell (as we perceive

by Sir Philip Hoby) that the said alienacion of certeine plate, Jewelles, and ornamentes was made at the principall and in manner onlie instigacion of Mr. Cox and Mr. Heynes, we certifie y^r^ honorable L. that the said reaport and informacion be most untrue. For whatsoever is done in the said matters is done by our whole consent and agreement, and therefor we desire your L. to credit such persons with their reaporte and informacion as thei be woorthie. Thus we besech Almightie God long to preserve y^r^ Honorable L. in much honor and felicitie. From the Kinges Majesties Free Chapell within his Castell of Windsore, &c.

Your humble orators to commaund,

W. Franklin, Deane.

Rich. Coxe. Simon Heines. Owen Oglethorpe.

Arthur Cole. Jhon Robins. Rich. Arch. Henry Aglionby.

The effect of a Statute in Windesor College sent in the same letter.

Ordinamus siquidem et statuimus authoritate et mandato Domini Regis prædicti quod ipsorum Capelle et Collegii Canonici universi Jus canonicale, necnon libertates et insignia canonicalia similia, qualia canonicis Ecclesiarum Cathedralium Regni Anglie de jure vel consuetudine competere dinoscuntur habeant et fruantur eisdem, salva modificatione subscripta. Jus in super et proprietatem beneficiorum ecclesiasticorum, terrarum, maneriorum, possessionum, reddituum, bonorum, jurium et jurisdictionum per eundem Dominum Regem datorum seu assignatorum pro Collegio dicte Capelle; necnon beneficia ecclesiastica, bonaque nobilia et immobilia eisdem adquisita et imposterum adquirenda eidem Capelle seu Collegio qualitercunque obvenientia seu obventura Statuimus et ordinamus ad Capellam et Collegium ac ipsorum custodem et Canonicos ceterosque ministros præsentes et futuros communiter pertinere; prefatoque Collegio et ipsius custodi qui pro tempore fuerit Statuimus et ordinamus licere, nomine Capelle ac Collegij predictorum, corporalem possessionem beneficiorum ecclesiasticorum, rerum, maneriorum, bonorum, reddituum, proventuum, possessionum, jurium et jurisdictionum assignatorum et assignandorum, adquirendorum seu conferendorum eisdem post hec per quemcunque liberè licitèque apprehendere ac tenere, prefatoque collegio et ipsius custodi ac canonicis ejusdem disponere de ipsis prout viderint expedire.

A Declaration of Plate, Jewelles, and other Church Ornamentes sold and distributed in the II. III. and V^th^ yeeres of our Soueraigne Lord King Edward the VI^th^ in the College of Windesore.

The Copie of Mr. Rich. Coxe Bill.

Imprimis. The second yeere of the Kinges Majesties reigne Mr. Heynes and Mr. Barker sold by the consent of the Deane and the Chapter a pixe of golde and a pair of beades of gold, wherfor and to whom I know not, but as may appeere by their billes.

Item the iij yeere of the Kinges Majesties reign Mr. Heynes and Mr. Arche sold certaine procession crosses, basons, candelstickes, censors, chalices, and ij litle ymages of our Ladie and an ymage of S. George, the valew wherof is unknowen to me, but as may appere by their billes.

All which plate was sold for our necessities upon urgent causes, as doth appeere by a book deliverid to the Commissioners by the Deane and Chapter.

Item in the fifth yere of the King's Majestie the Deane and the Chapter delivered me a chalice of gold, which I sold for cclx^li^.

Item in the iij[d] yeere of o[r] said Soveraigne Lord the Deane and Chapter gave away and made distribucion of all Copes, vestmentes, and other Church ornamentes, saving those that do now remaine, everie man having his porcion as he was allotted by commune consent.

And to tell what everie man had particularly I think it not possible. For my part I had iij clothes of Arras given and allotted to me by all their consentes. Other thinges were verie small, and I wot not what.

All theis thinges we have thus used because thei be our oune by the Kinges letters patentes, and by our statutes the disposicion of them apperteineth to us. And as ever I could learne we never had enie thing to the contrarie.

RICH. COXE.

THE AUNSWER OF OWYNE OGLETHORPE, CANON OF WINDESOUR, TO CERTAIN ARTICLES PROPOSED TO HIM BY THE RIGHT HONORABLE S[r] PHILIP HOBY, KNIGHT, M[r] THO. WELDON AND M[r] JHON NORRIS BEING IN COMMISSION WITH HIM.

The Copie of Mr. Oglethorpe's Bill.

It may please your worshipp to be advertized that sins my first admission to be Canon of this College I have not much continued here, save onlie at the time of my residence, and when I passe to and fro betwixt Oxford and London.

I never was Officer in this College, save once elected to be Thesaurer, which I occupied by a deputie, bicause of my absence, so that I do not know perfectlie the state of the College, neither the possession and Revenues of it, nor yet the Jewelles and percelles of plate, that either be yet remaining in the College, or that have bine solde sins my cōming first hither.

I do confesse that at my being her and passing this waies to London, I have set my hande (as I have bine desired by the Chapter,) to divers billes at sundrie times for the sale of certain plate and jewelles, and namely of the Golden chalice and golden beades, for to defray and discharge certain great and weightie charges otherwise importable to the College, as the Deane and Chapter enfourmed me. But I never knew what unces of plate was solde at anie time, nor for what value nor by whom, nor I was not desirous to know, bicause I did not discredite the doinges and actes of the Deane and Chapter, neither in selling of the plate, nor yet in bestowing of it for the College use and necessitie, thinking then (as I do now) that the propertie and use thereof was in them to use for the Colleges saftie and commoditie.

I confess that I did somewhat mislike the distribution of the vestrie stuff, both for bicause it was not done by so generall a consent as was th'other (for I was not privie till it was done), and bicause also there was no such urgentive or necessitie alleaged before it was done, as was for selling the plate, nor yet so well imploied and bestowed. And yet bicause the Deane and more part, and all that was present as I heare say, did agree to it, I held me content, and a good season after tooke at Mr. Whithornes handes the portion thei had kept for me (unlike unto other mens as thei say that sawe it), the which after I had kept a good while I sold to a Goldsmithe of London altogether for xx[li], being as I suppose more then it was woorthe, for there was nothing of it good but one Cope of Tissew; and of the forsaid somme I lost by the falle of monei, the rather as I suppose bicause it was not well and justlie gotten and come bye.

Yours with his praiers, OWYNN OGLETHORP.

PERCELLES OF PLATE PUT TO VENDITION IN THE YERE OF OUR LORD 1548, IN THE MONETH OF JANUARIE.

The Copie of Mr. Jhon Robins' Bill.

Imprimis the back of the holy crosse, being of plate of golde.
Item a long peece of gold perteining to the garnishing of the holie crosse.
Item a Capse of gold, wherin a Saphire was set.
Item ij other Capses of golde, wherin other 2 Saphires were set.
Item another Capse of golde, wherein a diamonde was sett.
Item a little plate of gold, wherein S^nt^ Georges heart.
Item a lion of gold, with a vice of gold and a little Aungell.
Item 2 litle candlesticks of silver, percel gilt.
Item 2 peeces of louse gold perteining to the garnishing of the holie Crosse.
Item the plumes of S. George's helmet.
Item the foote of the said plumes.
Item divers small peeces of broken silver.
Item the dreine and the cover of the lampe.
Item a monster of silver and gilt.
Item one Senser.
Item a handell of the Trindell for Candlemas day.
Item the foot of the lampe.
Item a great Crosse with the foote silver and gilt.
Item a little Cross with the foote.
Item two old seles.

Which percelles of plate above written Mr. Wⁿms, Mr. Barker, and Mr. Mallet, by the commune consent of the Deane and Chapter, solde at London, and received for it the somme of five hundrethe fortie and seven poundes and eleven shilinges. To whom thei solde it I can not tell, but I think surelie that Wigg the Goldsmith had a great porcion of it.

Item in the yere of our Lord 1549, in the mooneth of July, Mr. Heines and Mr. Barker, by like consent of the Deane and Chapter, sold at London a pixe of golde and a pair of beades of golde, and received for it two hundreth and fourtene poundes and sixtene shillinges. To whom they sold it I cannot tell, but I think to Wigg the Goldsmith.

Item the third yeere of the reigne of our Soveraigne Lord King Edward the sixt, Mr. Heines and Mr. Arche, by the consent of the Deane and Chapter, solde at London certain procession crosses, basons, candlestickes, Sensers, Chalices, and two small images, one of our Lady and another of S. George, with other percelles, to the value of four hundred threescore and seven pounds and xii^d^; and it was sold, as thei saye themselves which had the sale of it, to Wigg and Dickson, Goldsmithes.

Item in the fifth yeer of our said Souveraigne Lord King Edward the vj Mr. Cox, by the consent of the Deane and Chapter, did sell to Dickson the goldsmith a Chalis of gold for the Somme of two hundreth threescore pounds.

Item there was iii or iiij peeces of olde Arras, of the which to my remembraunce Mr. Deane had one and Mr. Cole another, Mr. Arch or Mr. Barker another, and aunswered the College for that fortie poundes, to my remembrance.

Item to my remembrance Mr. Cox had a peece of arras given him, and Mr. Heines another.

Item I Jhon Robins had a porcion of the Copes and the vestmentes, as other of my felowes had, but how manie, so God helpe me, I cannot tell; but such as thei were I sold them to the same man that Mr. Oglethorpe sold his, and had for them about twenty-eight poundes.

Per me JOANNEM ROBINS

The Copie of Mr. Henry Aglionbies Bill.

Memorandum that I Henry Aglionby did enter into the Kinges Majesties Collegiall Free Chappell in his Castle most Roiall in New windesore the xiiij day of October xxxviijth yeere of the most famous King woorthie of such memorie my Soueraigne Lorde and Master King Henry viij &c. Upon my faith to God and mine allegiaunce towardes the Kinges highnes by the grace of God Edward the sixt &c. the viii of August and sixt yeere of his most gracious reigne, By theis presentes do confesse All articles following to be true to my knowleage as upon charge before.

That is, wheras divers sales hath bine made sins, as I suppose, the third yeere of the raigne of our said Soveraigne Lord Edw. the vjth for necessities of his Majesties said College, in particular neither in generall I ame not able to make aunswer. My reason is, I never was officer. I never was byer ne seller. Those which was it may appeere by particulers, the whole by their bookes of their accomptes. So that for that I have no more to make aunswer as upon my oth to fore. But at the end of the yeere the charges of the said College discharged by Audit of the Chaunter, Steward, and Treasorer, my part of the divident according to the rate of my personall residens one yeere as the last by fall of monei a xiij^{li}, and some other yeere xxv^{li}, other six. Not this withstanding I do confesse that the last yeere I received by a mutuall divident so manie copes, vestmentes, albes, frontelles, as I received xxvj^{li} xiij^{s} iiij^{d}. Item for ij olde copes of white dornix xx^{s}. Item at the same time broken silver as of Sensers and crewettes as I received five poundes.

The names of the sellers, first Mr. Anthony Barker and Mr. Arche.

The second as I suppose Mr. Arche and Mr. Mallet.

The third as I suppose Mr. Wttms and Mr. Arch wth others, Mr. Haines.

The fourth Mr. Amner and Mr. Haines.

Theis within named may mak their aunsweres by their perticuler sales, receytes, the names of the Goldsmithes, the perticulers how manie unces of golde, how manie of dooble gilt, and how manie percell gilt.

Per me HENRICU' AGLIONBY.

Test. manu propria.

THE VIIJ DAY OF AUGUST in the yeere of our Lorde 1552, and the vj yeere of the reigne of our Soueraigne Lorde King Edward the vjth.

The Copie of Nicolas Udall's Bill.

What Treasures, Jewelles, ornamentes, or other gooddes of the Collegeat Churche of Windesore wer in the Treasurie orre vestrie of the same College or elswhere befor the feast of pentecost last past, I know not by enie perticularitie. What sale of enie percelles or percell of the premisses

hath bine made at enie time before the said feast or where or to whom or by whom, or to whose use, or what hath by enie prebendarie bine received for enie such things otherwise then by hearing as occasion lay of some of the parties confessions before you the King's Maj^{ties} Commissioners in a generalitie I know not.

And the specialties of them more then that I heard Mr. Deane of this house confesse before yr Masterships that he had at times received for his porcion of the sale of the premisses to his estimacion and judgement under the somme of xl^{li} I remember not.

Mr. Aglionby tolde me that he received for his porcion at a divident of Copes and other thinges that was here made about the somme of xxvj li. xiii s. iiij d.

Per me NICOLAUM UDALL.

THE COPIE OF MR. RICHARD TOURNER'S BILL, 8 AUGUST, 1552.

RICHARD TOURNER, which hath been prebendarie of this College little above halfe a yeere, deposeth before God and upon his allegeaunce that sins that time (to his knowlege) there was neithor plate, jewelles, copes, or enie other Church goodes belonging to this College, either sold, embeseled, or diminished by enie maner of meanes or coulour.

Item the said Richard hath deposed before God and upon his allegeaunce, That where the said Richard dwelt within the said College by the space of xv yeeres, before he was prebendarie there: he hath knowen the College at his first comming and long after, even during the time of the old Romishe and supersticious services, to have bene richlie and verie sumptuously endowed with divers kindes of plate and Jewelles, as Sensers, Candlestickes, relikes, ymages, basons, a lampe, a Sconse, a Shipp, silvered staves, silvered bookes, paxes, chalices, litle belles of silver (as the voice went), crosses of silver and gilt, and a pair of beades of golde (which beades I never saw), a chalice of gold (which chalice I never sawe), The holie crosse with a broade foote set with stones, S^{t} Georges head and salet of golde. All theis thinges partlie have I seene, but surely much speach have I hearde of aboundaunce of theis thinges, but I am not able to advouche how manie peeces thei were in nombre, or what was the value of them.

Item the said Richard hath deposed upon his allegiaunce that he cannot certifie particulerly or personally, who thei ware that made alienacion or vendicion of enie of the said thinges. Onlie he confesseth that he at divers times hath heard it whispered emongst the ministers of the quier, That the Deane and the prebendaries had made vendition of divers thinges aforsaid, but he never knew to whom or by whom enie such sale was made.

Item the said Richard hath heard that the Deane and Prebendaries have devided certein Copes and other like thinges emong them selves. Whereof I have seene parte tourned into course Coushins within their houses.

Per me RICH^{M} TOURNER.

8 Augt. 1552. A^{o} Regni Reg. Ed^{i}. 6. 6^{o}.

THE COPIE OF THE SEXTONS BILL, FRAUNCES LAKIN AND THOTHER.

All such Jewelles being in the Chaunter's handes at the making of King Henry theightes Inventorie, we acknowledge them, that we had them in our keaping by the consent of Mr. Deane, and Mr. Doctor Cox, with the residue of the Masters which we be not able to name, did take all these said Jewelles with copes and other ornamentes, and the keies also out of our handes, and did cleerly discharge us, and did deliver the said keies unto Mr. Whithorne, being Mr. Cox deputie.

Sins the last visitation was a certein of plate [sent awaye], but we cannot tell how much it was, for it was in a Clothsack fast sealed up, but by estimacion an horselode. Mr. Heines being present at that time and Mr. Wllms, and Mr. Arche, and Mr. Cole, and Mr. Robins, and Mr. Aglionby, and Mr. Whitehorne being under Treasurer, and Mr. Barker which is now dead. This Clothsak was carried to London by the consent of all of them afore rehearsed, to what use we cannot tell.

At the time that the Inventory was taken of King Henry Theight were there present Mr. Deane, Simons, Barker, Mr. Williams, Mr. Cole, Mr. Robins. Whether there were enie more we can not tell.

Md. The Kinges palle of black vellet was devided emonge them, as Mr. Robins and others. And an other palle of Queine Janes, with a crosse of white silver upon it.

By me FRANCES LAKIN.

Fraunces Lakin and Jhon Ingeram sayen, that there was more then is mentioned in the Inventorie by ij hanginges of Arras, which did hang on King Henry the viiiths side, delivered to Mr. Whithorne under Treasurer about ij yeeres sins.

More the said Fraunces saith that about viii yeeres past ther was a Cock of silver dooble gilt, the bodie of pearle, as he alwais took it, which is not in the Inventory.

JEWELLES AND ORNAMENTES BELONGING TO THE COLLEGE OF WINDESOR DELIVERED TO GEORGE WHITHORNE.

Copie of Mr. Whithorns Bill,

Imprimis. The holie crosse with the foote all gold and stone.

Item S. George's head all gold with pearle and stone.

Item a pax of golde and stone, and a pair of beades golde.

Item ij ymages of or Ladie, one great and a lesser.

Delivered to Mr. Deane, Mr. Heines, Mr. Simons, Mr. Arch, Mr. Robins, Mr. Cole, Mr. Aglionby, by Mr. Willms.

Item a lampe of silver, basons, chalices, Sensors, crewettes, and an holie water pot, a boxe of chrismatorie, a monster, and candlestickes.

Item hanginges for the quier of cloth of golde and Arras, and S. Catharin and the stalles, and Mr Deanes stalle.

Copes, vestmentes, alter clothes, the which Mr. Deane, Mr. Amner, Mr. Heines, Mr. Wllms, Mr. Arch, Mr. Barker, Mr. Cole, Mr. Robins, and Mr. Aglonby deviding everie man his part, leaving me in the vestrie for Mr. Simons, Mr. Oglethorpe, and Mr. Malette partes in the vestrie to deliver them, and so I delivered them everie man as he came home there. And thei gave me old thinges left, which I devided some to the Sextons, and made myself a Tester, and a Courtein, and a cupboord cloth.

Per me GEORGIUM WHITEHORNE.

Sir Philip Hoby despatched these documents to the Privy Council by the hands of his colleague Mr. Weldon, and forwarded his report of the proceedings in the accompanying letter.

To the right honorable and our Singuler good Lordes of the Kinges Majesties most honorable pryvy Counsaill. (*Indorsement*).

Our most humble duties unto your most honourable Lordships remembred. It may please the same by thiese prentes to understaund all our procedinges (by thaucthoritie of the Kinges Majesties Commission directed unto us) for and conserning the survey of the Jewelles, plate, and ornaments of all kindes within the Colledge of Windesour, the which is as followeth.

That we imediately upon the receipt of his hieghness said Commission assembled ourselves together, and appoincted a day most convenient for our meting and setting there for thaccomplishment of the ententes of the same Commission to the best of our powers as to our duties appertayneth. At that day appoincted we mett, and then and there tooke first an Inventorie of all the Jewelles, plates, Coopes, and all other ornamentes and impelmentes whatsoever as at that present was remayning within the said College as appertayneing and belonging unto the same, as more amply shall appeare to your honors by Thinventory therof herewith sent.[a] And at that present also by diligent searche and inquisicion, there chaunced to come to our handes an other Inventory, taken in the xxxvith yere of the Raigne of the Kinges Majesties father of most famous memory, decessed, wherin is mentioned asmoche plate, Jewelles, and ornamentes of all sortes as the said Colledge was endowed with all at the making therof; the which Inventory, as we send it herewith to your honours, so we conferring the same with the above-named Inventory taken by us, and therby findeing that there is nowe but a smale porcion of thinges remayneing in the Colledge in comparison to that which was there at the making of the said Inventory in the Kinges Majesties daies that deade is, and considering that the lack of those things now misseing, as appeareth by the same Inventory, are very requisite and mete to be brought to light, howe and after what manner thei are gone and bestowed; For asmoch as we had no time to go about the same at this our first setting there, we appoincted an other day for the same purpose to mete there, and commaunded the Deane and Chanons there present upon their allegeaunce to be then there again before us without fayleing, And also sent like commaundment to those Canons that wer absent to come thither in like manner. When the day came we arryved there, and findeing the Deane with sundry of the Cannons absent by reason of sicknes, and therefor not hable to come thither as we wer credibly enformed, our pretended purpose by that meanes was not only letted for that day, but also one other day in like maner that we had appoineted, and came thither. Then perceyveing that time wasted by the missceing twise of our purpose by their absense, and remembering that your honours looke for some advertisement from us in that behalf, as appered by your honorable Letters of the viith of this present which we have received Monday last past, being our day that we satt there again, we did not only then examyn them generally touching the thinges lacking, but also gave every of them that were presente severally by themselves commaundment upon their allegeaunce to make and present unto us the same day before our departure thens, a full, perfect, just, and true declaration in writeing under their

[a] *Vide supra.*

hand particularly what Jewelles, plate, ornaments of all sortes, and all other thinges whatsoever belonging to that Colledge have (to their knowledge) been sold alienated, bestowed, distrybuted, or otherwise made awaye aswell by themselves, as by any other person or persons sins their first cumming into that Colledge untill this time (by whom thei were solde or distributed, and to whom), how moche everie thing of golde and sylver so made awaye did weighe, thornamentes of every kinde, what they wer, and howe moch money was receyved for the same particularly. Upon which our examinacon and stracte charge gyven unto them and every of them there presente, thei with all diligence made oute and brought unto us their severall billes under their handes, sent also herewith unto your Honors.[a] Whereunto they will stande and affyrme to be most true, just, and all they knowe in that behalf, or els willingly they wishe to receive such punishment as thei knowe must ensue for the contrary to their extreme perille. And in dede not being hable to aunswer unto the thinges lacking so fully as it behoveth They then before us submitted themselves most humbly to the King's Majestie to be ordered in such sorte in this behalf as to his Highness shall be thought most mete and convenient. And this being thoff that we have been hable possible to do in this matter, we have thought good therfore not only to sende unto your honors as now we do herewith, aswel the two Inventories beforenamed, whereby your honors may perceyve what is presently remayening in the said Colledge and that which is lacking, as likewise the said Deane and Canons billes that be here present, what thei have confessed, But also to give them (as well that be absent as present) commaundment upon their alleagence that thei faile not but be at Windesour altogether at Michaelmas day next cumming, there to appeare either before your Honors, if it shall please the same, or otherwise before us by force of our Commission, so as thei may aunswer to such thinges as shall in the meane time be thought mete by your honors to be further obiected and doon towardes them accordingly, and upon advertisement of your pleasures and determinacions what we shall do more therein, we shall most ernestly and diligently apply ourselves to thexecucion of the same to your honors' contentacion which we humbly wishe as mete is. And where your honorable Lordships addressed a letter unto us for thexaminacion of Richard Turner touching two billes of accusation exhibited against him, "we examineing both the said Turner and sundrey others of the Chapell of Windesor for the better triall of the truthe of the matter, the said Turner confessed that long sins he treated of the twoo statutes mencioned in one of the billes, for prestes spending a certen somme should kepe a greate horse,[b] and paying of first fruictes as misliking the same, the which likewise thei of the chapell advowched, but not that he spake it so disdainfully, and to that purpose as the bill is penned; and as to thother bill he and thei make deniall that he never spake it, nor they never harde no suche words procede out of his mouthe," as Mr. Weldon, the bearer hereof, can declare at large unto your Honors. By recognisaunce we have bound the said Turner in fyve hundreth markes to appeare before your Honours at any time he shalbe called to aunswer to such thinges as shall be objected against him. Thus beseching your Honourable Lord-

[a] *Vide supra.*

[b] By Statute 33 H. VIII. c. 5, every spiritual person having benefices, &c. to the yearly value of 500 marks was to keep three stoned saddle-horses; those having benefices, &c. above £100 and under 500 marks per annum, to keep two. The various enactments regarding the payment of annates and first-fruits to the King, instead of to the Pope, are well known.

ships to take in good parte these our proceedings in the premises, wherin we have doon as moche as our simple witte by all waies and meanes could devise, we beseech the lyveing Lord in helth, honour, and felicitie to preserve your honorable Lordshipes. From Windesour the ix[th] of August, 1552.

Your Lordshipes to command,

PHELYP HOBY. THOM[AS WELDON].[a]

These confessions, explanations, and excuses of the Dean and Chapter availed them not. They were required by the Privy Council to surrender to the King's use all their remaining treasures. The following indenture proves their compliance with the King's demand in the early part of the month of October 1552.

We are, however, able to prosecute yet further the history of the plate, jewells, and rich treasures of St. George's College, Windsor. In the month of November they were conveyed from the Jewel-house to the Tower, with a requisition for their "being coyned with convenient spede." The two accompanying documents are sufficient testimony to the fact:—

This bill indented, made the iij[de] of October, anno Regni Regis Edwardi vj[ti] Sexto, Witnesseth that the Deane and Canons of the Kinges Majesties Colledge at Windesor have delivered by vertue of a letter to them directed from the Kinges Counsaile, dated the first of October Anno vi[to] predicto, to the Kinges Highnes use, to Sir Anthonye Auchar, knyght, Master and Threasorer of the Kinges Juelles and plate, by the handes of Edmunde Pigeon, oone of thofficers of the same Office of the Kinges Juelles, all theise parcells of Juelles and plate apperteyninge to the said Colledge, as perticulerly hereafter enseweth. Surveyed and viewed by the Lord Marques of Northampton, Great Chamberlen of England, S[r] Philipp Hobby, Morice Barkeley, and Humphrey Foster, knyghtes, Thomas Weldone and John Norice, Esquiers, Commissioners appointed by the Kinges Majestie in that behalf by vertue of his highnes Commission to them directed, bearinge date the xv[th] of Maye, Anno vi[to] predicto, all which said Juecelles and plate were delivered as aforesaid, in the sight of the said Sir Philipp Hobby and Sir Morice Berkeley, knyghts, Thomas Weldone and John Norice, Esquiers, as followeth: —

Inprimis one pixe of gold sett with stone and perles, with two Christalles, thone in the Bottom, and thother on the cover. p̃cs. x oz.

Item one pax of gold with the Image of our Ladye sett with vi great course peerle and vi course stones.

Item one paxe of gold with the Image of Christ rising out of the sepulcre sett with stone and pearle in the border.

Item one Tablet of gold with the Image of the Trinitie sett with perle and stone.

[a] Cotton MSS. Cal. B. VII. folios 444, 445. There is a copy of a draft of this letter in Add. MS. 5498, fol. 45. The only material variation is in the passage marked * *, which in the draft reads as follows:— . . . . . having therupon not onlie examined him, but also sundrie of the Clearkes of the College that were present at his lectures, we find by their Examinacion that thei are very sore agreeved with him even of an olde grudge and malice as it should seeme, and that they are not hable to affirme and prove the sainges mentioned in the said billes against Tourner . . . . .

Item one Tablet of gold sett withe diamondes furneshed of the Salutation with two Leaves foldinge ennamiled.

Item two Crewettes of christall, garnished with silver and gilt.

Item one Little Crosse standing upon a cusshion, garnished with gold, and also sylver and guilt.

Item oone S[t] George's head with an helmet of gold, garneshed with stone and peerle, lacking one collett and a peerle, with a button lacking on the helmet.

Item one great Image of our Ladie of sylver guilt.

Item the foote of the Crosse of gold, garneshed with sondrye stones, many lacking, and also lacking a lion of gold.

Item oone Chalis with a patten, all guilt.

Item two great Basons, all guilt.

Item two of the greatest Candlestickes, all guilt.

Item two other great Candlestickes, all guilt.

Item two little Candlestickes, all guilt.

Item two Candlesticks, parcell guilt.

Item three Sensors, whereof one is all guilt.

Item one Monstraunce guilt, with a plate of gold ennamiled.

Item one Crosse, all gilt, with a foote.

Item one payr of Crewettes, all guilt.

Item one payre of other Crewettes, parcell guilt.

Item one square Agath stone, garnisshed with silver.

Item vii Rectors staves tipped with sylver, whereof foure hath but one knopp at thendes.

W. Frankelyn.	Owinus Oglethorpus.	Arthur Cole.
Ric. Cox.	Jhon Robyns.	Richard Arche.
Simon Heynes.	Francys Malet.	Nicolas Wall.
Henri Williams.	Henry Aglionby.	

[Each article has prefaced to it in the margin "ex[r]" for *examinatur*, to certify the correctness of the List.]

M[d]m. That the xxv[th] of October anno Regni Regis Ed. vi[ti] sexto All the forenamed plate, aswell golde, as also guilte plate, parcell guilte and white, were weyed in the Juelhouse within the Tower of London by John Halile and Edmunde Pygeon, officers of the Kinges Majesties Juelles and plate, in the syght of Sir Morice Barkeley, Sir Arthur Darcy, knight, and Thomas Weldon, Esquier, amounting in golde, stone, and peerle to the summe of Sixe hunderth fourescore fyve ounces thre quarters: And in guilte, parcell guilte and white plate to the summe of thre thowsande fyve hunderth fourtye and nyne ounces and a half ounce, which plate remayneth in the said Juell house within the Tower the said Daye and Yere.[a]

After o[r] hartie com̃endac̃ons. Where as ther was lately delivered unto y[r] custodie certaine plate that cam from Windesor Colledge, aswell guilt as parcell guilt and white: fforasmoch as the

[a] Additional MSS. 5751, fol. 327. Original Bill on Parchment

Kinges Majestie is pleased to have the same plate put to coyne w^t cõvenient ꝺpede, These be to require you forthwith uppon the receipt hereof to cause the said guilte, parcell guilt, and white plate to be convoied to the Tower of London, and there to deliver the same by bill indentid to the Threasorour of the mintes for the purpose aforesaid, reserving still the gold plate that cam from the said colledge in your custodie untill the Kinges Majesties farder pleasure shalbe signified unto you. Wherof we pray you faile not, and so we bid you farewell. From Westminster the ix^th of November, 1552. Y^r loving frendes,[a]

(*signatures and address cut off.*)

THIS INDENTURE, made the x^th of November, the sixth yere of the reigne of our sovereigne Lorde Edwarde the Sixth, by the grace of God King of Englande, Fraunce, and Irelande, defendour of the faith, and in Earth immediatly under Christe of the Churche of Englande, and also of Irelande the supreme hedde: BETWENE Thomas Egerton esquire, Threasourer of the Kinges Majesties myntes on thone partie, And John Halile and Edmunde Pigeon, officers of the Kinges Juelles and plate on thouther partie: WYTNESSETH, that where the Kinges Majesties most honorable Prevye Counsail addressed ther letters to S^r Anthony Aucher, Knight, Master and Threasourer of his Highnes Juelles and plate, and in his absence to his deputie or officers of the same office, for the delivery of certeigne plate guilt, parcell guilt, and white, lately received into thoffice of the Kinges Majesties Juelles from his Highnes Colledge at Windesor to the said Thomas Egerton to the Kinges Majesties use Indenting with the same Thomas Egerton for the receptes of the same plate, as by the said letters plainly appereth. The said John Halile and Edmunde Pigeon, according to the tenor of the said lettres, hath with all diligence delyvered unto the said Egerton to his Highness's use all these parcelles of guilt plate hereafter ensuing: that is to say, First, two cruettes of christall garneshid with silver and guilte, põȝ together twenty-fyve ounces and a half. ITEM, oone greate image of our Ladye of silver and guilt, the silver and guilt põȝ two thousande sixtene ounces di. ITEM, oone Challice with a paten all guilt and enamelled therin, weing Threscore and seven ounces. ITEM, two great Basones all guilt weing oone hundreth fourescore and seven ounces. ITEM, two of the greatest Candlestikes all guilt with two peces of woode in them weyng two hundredth ffivetye and sixe ounces. ITEM, two other great candelstykes all guilte weinge oone hundreth fourtie Thre ounces. ITEM, two lytle candlestickes all guilte weing ffyvetie fyve ounces. ITEM, oone Censer all guilt weing Thretie and sixe ounces. ITEM, oone Monstraunce guilte with a plate of gold enameled, the guilt weing oone hundreth threscore and fourtenne ounces. ITEM, oone Crosse all guilte with a foote weing Thirtie and sixe ounces. ITEM, oone peire of Cruettes all guilt weing fourtene ounces. SUME of all the same guilt plate with the Christalle and wodde amounteth unto three thowsand and Tenne ounces. AND also these parcelles of parcell guilt and white plate, viz. the hedde of the Lady and her childe being parcell guilte weing Thre hundreth ounces and a half. ITEM, two Candelstickes parcell guilte weing Threscore and tenne ounces. ITEM, oone paire of Cruettes parcell guilte weing Sixe ounces and a half. ITEM, two Censers white weing Threscore thrittene ounces. ITEM, the garneshment of a square Stone of Agat and the garneshment of Seven Rector Staves of

[a] Additional MSS. 5751, fol. 328. This is the letter from the Privy Council referred to in the next document; the lower half of the sheet of paper on which it is written, and which contained the signatures and address, has been cut off.

silver weing fourescore and tenne ounces, which parcell guilt and white plate amounteth unto ffyve hundreth and fourtie ounces: BOTH which Sommes of guilt, parcell guilt, and white with the Christal and wodde undefased weieth Thre thousand fyve hundreth fourtye and nyne ounces and a half. ALL which parcelles of plate guilt, parcell guilt, and white as is aforesaide the said Thomas Egerton confesseth by these presents to have recevid of the said John Halile and Edmunde Pigeon to the Kinges Majesties use; And the said John Halile and Edmunde Pigeon to and with the said Thomas Egerton witnesseth by these prentes that the Christall and wodde aforemencioned weyed Twentie ounces and a half; AND so receyved in clere silver guilte Two thowsand Nyne hundreth ffourescore and Nyne ounces, AND in parcell guilte and white plate fyve hundreth ffourtie ounces. IN WITNES wherof aswell the hande and Seale of the said Thomas Egerton as the handes and Seales of the said John Hallyle and Edmunde Pigeon to theis presentes intherchaungably bene putte the daye and yere abovesaid.[a]

These documents have extended to a greater length than could have been wished. They have traced, however, the history of the treasures of the wealthy College at Windsor, *ab ovo ad mala*, from the first shadow of the fear of their confiscation to their actual committal to the refining pot. They have given in the injunctions enjoined on the Royal Commissioners, in the reports made to the Privy Council, in the defences, explanations, and mutual evasion of responsibility in the persons accused, an admirable illustration of an important phase in English History. It is to be hoped that they may be thought worthy of a permanent record in the archives of the Society of Antiquaries, as containing the fullest and most perfect record extant of the whole proceedings of one of those Visitations of Religious Houses which formed so common a feature in the annals of the middle portion of the sixteenth century.

[a] Add. MSS. British Museum, 5751, 328. Original Indenture on Parchment. Label for the Seal torn away. From another entry in this book, which is a collection of royal and other warrants and accounts relating to the Great Wardrobe and Jewel Office, tempp. Edw. VI., Eliz., and Jac. I., it would seem that much plate and jewels belonging to Windsor, Hampton Court, and other chapels royal, had already in 1548 been appropriated to the King's use under the order of the Protector Somerset.

VI.—*Notes on the Hut-Urns and other objects discovered in an ancient Cemetery in the Commune of Marino* (*Province of Rome*). *By Doctor* L. Pigorini, *Director of the Royal Museum of Antiquities at Parma, and Sir* John Lubbock, *Bart. F.R.S. F.S.A.*

Read April 2nd, 1868.

Although every object of antiquity possesses a certain interest for the archæologist, still that interest is much increased when a number are found together, and under circumstances which imply that they were contemporaneous.

A "find" of special interest was made in the year 1817 at Albano, and described in a letter from Dr. A. Visconti to Signor G. Carnevali di Albano. Since however this letter does not give a complete description of the antiquities in question, and is moreover not easily accessible to archæologists, we have thought that a more complete account would be acceptable to the Society, the pottery belonging to this find being of peculiar interest.

Although we are well acquainted with the weapons, tools, and even dress of the Bronze age, our knowledge of the houses used during that period is still very limited. The Swiss lake-habitations have indeed thrown some light on the subject, but our principal information is derived from certain urns in the form of huts, and hence known as "hut-urns," which were used in ancient interments to contain the ashes of the dead.

We know that various races in different parts of the world have constructed their graves on the model of their houses, or have even used the actual houses themselves for that purpose.

When however cremation was practised, a full-sized house would manifestly be unnecessarily large, and hence appears to have arisen the idea of making small models in pottery, which would answer equally well for the purpose.

Several of these hut-urns have been found in Germany, and are thus described by Dr. Birch in his work on Ancient Pottery :

"Some remarkable sepulchral urns resembling those of the early inhabitants of Alba Longa already mentioned (vol. ii. p. 197), have been found in Germany,

and are distinctly Teutonic. They occur in the sepulchres of the period when bronze weapons were used, and before the predominance of Roman art. One found at Mount Chemnitz, in Thüringen, had a cylindrical body and conical top, imitating a roof. In this was a square orifice, representing the door or window, by which the ashes of the dead were introduced, and the whole then secured by a small door fastened with a metal pin. A second vase was found at Roeune; a third in the island of Bornholm A similar urn exhumed at Paschim had a shorter body, taller roof, and door at the side. Still more remarkable was another found at Aschersleben, which has its cover modelled in shape of a tall conical thatched roof, and the door with its ring still remaining. Another with a taller body, a flatter roof, with a door at the side, was found at Klus, near Halberstadt." The larger vases were used to hold the ashes of the dead.[a]

The accompanying woodcut[b] represents (on the right) the Aschersleben urn.



The central figure shows the German hut-urn which was found at Kiekindemark, and which, according to Lisch, from whose work[c] the illustration was originally taken, both from the nature of the tumulus in which it was discovered and from the objects found with it, undoubtedly belongs to the bronze age. Though simpler in character, it is very similar to the Italian hut-urns; a significant fact when we remember how closely the bronze arms and implements from different parts of Europe resemble one another. The urn on the left is from Halberstadt.

Another very remarkable piece of pottery which is in the Museum at Munich

[a] Birch's *History of Ancient Pottery*, ii. 392.

[b] Reprinted from Dr. Birch's work, by the kind permission of Mr. John Murray.

[c] Lisch. *Ueber die Hauaurnen* &c. 8vo. Schwerin, 1856.

appears to represent a lake-dwelling. Seven round huts, arranged in three rows of three each, round the outside of a square platform, inclose a central court, which is entered by a porch, while the platform itself is supported by four pillars, which apparently represent logs piled on one another. The outside of the huts is boldly ornamented with the double spiral so characteristic of the bronze age.

The Italian hut-urns which form the subject of the present communication were found under the following circumstances.

In the beginning of the year 1817, in the commune of Marino (province of Rome), between Castel Gandolfo and Albano, upon the hill called Monte Cucco, on the declivity which conducts to the pasture-land of Castel Gandolfo, some peasants in breaking up a portion of the soil, consisting of the so-called *peperino*, with the object of preparing it for the cultivation of the vine, discovered, in the course of their operations, the celebrated necropolis which forms the subject of this communication, and which commonly bears the name of the neighbouring city of Albano.

The first indications which appeared beneath the soil were sundry fragments of earthenware; and a little afterwards entire vases of various shapes, occasionally containing ashes: in the course of a short time, almost in the same place, and under similar circumstances, the hut-urns were brought to light. This discovery occasioned among the scientific world of Rome a great sensation, since it appeared to prove, that in the Roman territory, and before the cessation of the volcanic disturbances, there had existed a human race concerning which both history and tradition were altogether mute.

Still there remained some whose judgment refused to admit the extreme antiquity of the necropolis with which we are occupied.

The principal care of those who investigated the excavations was that of leaving a standing record of the remarkable facts observed, and Visconti, in a memoir [a] which he published on the discoveries, inserted a legally certified declaration deposing to the facts, as well as other documents which he considered expedient to confirm the theory he advanced. From his dissertation we think it convenient to extract so much as will serve to convey the exact history of the discovery:

"At the beginning of the excavation was found barely a palm and a

[a] Alessandro Visconti, *Lettera al Signor Giuseppe Carnevali di Albano, sopra alcuni vasi sepolcrali rinvenuti nelle vicinanze della antica Alba Longa.* Roma, 1817. *See also* Giuseppe Tambroni, *Intorno le urne cinerarie dissotterrate nel Pascolare di Castel Gandolfo.* (Memoria inserita negli Atti dell' Accademia Romana d' Archeologia. Tom. i. parte ii. p. 257.)

half[a] of natural soil, under which was the mass of *peperino*, which, when broken into, presented a thickness of two palms, and in the prosecution of the work the thickness of the mass was found to increase, and the superincumbent earth to decrease. There appeared under the live mass of *peperino* an earth inclining to whiteness, almost chalky, to the depth of three good palms, and three hours from the commencement of the work referred to we found in the earth beneath a terra-cotta vase. A pause at once ensued to afford an opportunity to the bystanders of seeing and examining the object exhumed, and meanwhile M. Carticoni took the measure of the thickness of the mass which covered this earth and found it to be two palms He then took the measure of the depth of the earth beneath the mass at the point where the object was discovered, and this was found to be a palm and a half. This done we proceeded to uncover the vase in question, raising it with the greatest care: it proved when removed from the earth to be in two portions; on examination of the fracture it was evidently not recent, but of ancient date. The shape of this vase was that of one of our small earthen stewing pans. Continuing the work we soon uncovered other broken vases buried like the one described. It was observable, as the work progressed, that the thickness of the mass increased, until at length it amounted to four palms. The next circumstance to be remarked was the appearance of pieces of pottery (*vettine*[b]), rather large, not heaped together, but singly, at a little distance from one another. Reflecting upon this new combination, we were led to the supposition that by the volcanic ashes, which at the present day are reduced to *peperino*, pressing and weighing on the soil, the works in terra-cotta were broken up and separated from one another. All the fragments of terra-cotta, large and small, as they were disinterred, were submitted to an examination in order to determine, as far as possible, the proper shape of the vases, but none of these fragments were sufficient to decide this point; however, it appeared from the bottom of a vase more entire than the rest that it had taken the shape of a water-pot (*pila*);[c] and this ended our excavation and our observations."

As to the entire discovery, here merely commenced, but which was completed by subsequent and more fortunate researches, we shall speak hereafter. At present it appears necessary only to remark that, of the objects collected in this very interesting locality, the greater and the better part are to be found in the

[a] The Roman *palmo* is equal to 0·223 *metres*.

[b] The large fictile vessels in which oil is kept are called in Rome '*vettine*.'

[c] The earthen pots are called in Rome '*pile*.'

Etruscan Museum at the Vatican. Others however, also of much value, are in the Kircherian Museum of the Collegio Romano; in the private collections of Sig. Luigi Ceselli, Professor Giuseppe Ponzi, and Cavaliere Michel Stefano de Rossi of Rome; in the Royal Archæological Museum of Parma; in the School of Industry of Lausanne; in the collection of Edmund Oldfield, Esq. F.S.A.; and finally in the British Museum in London, where, in addition to objects of this class, formerly acquired,[a] is the private collection of the late Duke de Blacas, which comprises many additional specimens. We know further that some of the fictile objects afforded by our necropolis were sold in Rome in 1866, but it is impossible to ascertain the name of the purchaser. Lastly, fifteen other vases from the same locality have been purchased for and are now preserved in the Royal Archæological Museum of Parma.

It is of course of great importance to the students of Italian palæoethnology and archæology to know what foundation of truth there was in the notice of the particular position of the necropolis which we are here describing. Notwithstanding the legal declaration of 1817, popular opinion remained in opposition to the statement of the discoverers. Excepting Bonstetten,[b] and the Duke de Blacas,[c] the latter of whom entertained an altogether erroneous idea as to the antiquity of our necropolis, it must be confessed that, according to the general opinion of those interested in the subject, the discoverers had fallen into a grave error. No one however, until recently, seems to have entertained the idea of instituting new investigations, so that, with the scrupulous exactitude of modern science, the question might be definitively determined.

L'Ampère in writing on this subject expresses his doubt as follows: "This discovery was arrived at in piercing through a volcanic stratum, and it is affirmed that they found the remains of a civilization anterior to the age of the Alban volcanoes, themselves anterior to the historic period. They had not remarked that the entrance to the tombs containing the antiquities, believed to be antediluvian, was lower, and opened upon an ancient road."[d]

Such was the opinion of L'Ampère, as quoted in the excellent notice of Cavaliere Pietro Rosa, whose recent examination of the Roman Campagna

[a] See Birch's *Ancient Pottery*, ii. 196.

[b] *Recueil d'Antiquités Suisses*, by M. le Baron G. de Bonstetten. Berne, 1855.

[c] *Mémoire sur une découverte de vases funéraires près d'Albano.* Extrait du xxviii[e] vol. des Mémoires de la Société Impériale des Antiquaires de France.

[d] *L'Histoire Romaine à Rome*, tom. 1, p. 471.

has added much to our knowledge of the subject, and gained a high reputation both in Italy and abroad.

In 1866 one of the present writers, in bringing the question before the Instituto di Corrispondenza Archeologica of Rome at the meeting on the 25th of March, proposed that some archæologists and geologists should together visit the site of the necropolis and investigate the arguments for and against Visconti's opinion,[a] and both the geological and topographical conditions of the place as well. And, though this motion was not then adopted, a careful examination of the locality where the necropolis exists was finally effected, and on 28th May one of us (Doctor Pigorini), together with Professor Ponzi, Cavalier Rosa, and Cavalier Michele Stefano de Rossi, found himself upon the spot. M. Rosa was the guide, from the intimate knowledge that he had of the Roman Campagna. It was his opinion that the necropolis touched upon a road which, setting out from Appia, a little higher up than Boville, connected this station with Alba Longa. This road traversed the "Pascolare" of Castel Gandolfo, and ascended the *intermonzio* which separates the summits of the two hills called Monte Crescenzo and Monte Cucco. It was at the top of this latter, in the declivity which leads to the "Pascolare," that the discovery of 1817 was made. Scarcely had we determined (thanks to the indications of Rosa) the ancient road and opened the site of the necropolis, than we were induced to reject as inadmissible the opinion that the position of the sepulchre in question was by any possibility accounted for by the presence of the road; of this there was no shadow of a doubt, from the difference of level between the surface of the road and the place where the tomb was found, and more than all from the distance which separated one from the other. This fact was sufficient, in connection with the absolute certainty that in 1817 the necropolis was covered with the *peperino*, to enable us to affirm that the sepulchre in question was more ancient than the stratum of stone which lay upon it; still we were desirous of obtaining further proof. To this end Cavalier Rosa had the happy thought to repair to Monte Cucco lower down than the place of the necropolis, but in the same declivity which commands the "Pascolare," to examine the soil of a newly planted vineyard, in the foundation of which it had been found necessary to break up the stratum of *peperino* which covered the superincumbent volcanic ashes in which the vine at the present day flourishes so vigorously. To our great satisfaction we collected scattered among the volcanic ashes some

[a] *La Paleoetnologia in Roma, in Napoli, nelle Marche e nelle Legazioni.* Relazione del Dottore Luigi Pigorini a S. E. il Ministro della Publica Istruzione. Parma, 1867, page 26.

fragments of earthenware perfectly identical with those of the necropolis, and which evidently were interred before the formation of the *peperino*.

Moreover we chanced to fall in with a vine-dresser of great intelligence, who, ignorant of the importance to us of the communication, and therefore with no inducement to exaggerate it, assured us that in the whole of this district, of a considerable extent, in all cases wherever it had been found necessary to break up the *peperino* for the purpose of planting olives and vines or for the cultivation of any part of the soil left up to the present day untilled, these pieces of earthenware were certain to be found, and, when he was interrogated as to the shape his description agreed perfectly with some of the vases figured by Blacas (table 5) and by Visconti (tables 1, 2, 3).

The results obtained from this excursion have been since amply confirmed by fresh and careful investigations by M. De Rossi, whose conclusions are set forth in a valuable report.[a]

At page 38 of this report De Rossi writes:—"Collecting in the first place the accounts of the discoveries made in 1817 and subsequently, and comparing them together, I have found that the objects discovered upon the removal of the *peperino*, namely the funeral urns, and their contents, were distributed over a considerable area; a certain evidence of a large necropolis, and indicative also of a numerous population. Proceeding to examine the stratum within which the objects are contained, I found it to cover an immense tract to a depth varying from a metre to a metre and a half; proof of an extensive eruption. But, anxious to determine more satisfactorily the position of the objects in question within the stratum, I broke up the *peperino* in a place where it had already been fractured by the instrument used for the purposes of cultivation, and exactly on the edge appeared two small isolated vases. At the bottom of the ashes upon the lower *peperino*, which is the bed of these ashes, were placed some fragments of a large urn, evidently the same which had contained the two smaller vases. The compact and homogeneous character of the sand (*sabbia*) left no doubt that it worked into a mass with the fragments of pottery at the time of the eruptive shower."

And again, somewhat later, referring to similar observations made in other and new excavations, De Rossi adds the following notice relative to a subsequent discovery made in his presence:—

"A large oil (or wine) jar was buried in the ashes, and covered by the *peperino* in the manner before described, and about which no doubt could be raised. It

[a] *Rapporto sugli studi e sulle scoperte paleoetnologiche del bacino della Campagna Romana. Roma*, 1867.

contained three vases only. The ashes which filled up the jar prevented our discovering the remains of the burnt bones which it must have contained. I turned over the crust of the thick *peperino* for about 50 cent. and I saw on the lower face it bore traces of an ancient vegetation of *lolium perenne*. From this it is easy to understand that above these ashes vegetation at one time must have flourished, and that a second eruption at a later period covered with *peperino* the ashes which had nourished the plants. With this crust the volcanic strata terminate; whence we are able to conclude with certainty that two eruptions have enveloped our vases with different strata, and that afterwards the activity of the Albano crater ceased. I have determined also how and why the greater part of the earthen vessels were broken into many fragments, although the eruption consisted of ashes only; the burning shower cracked the larger vessels; of this fact I have found positive proof."

These observations of De Rossi will have, in part at least, enabled our readers to understand the manner in which, upon breaking up the *peperino* of Castel Gandolfo, the objects which it is our intention here to describe were brought to light. But it may be as well to give some further particulars, drawing upon Visconti's memoir already referred to, which will always remain the most exact of all the accounts published of our necropolis.[a]

In the first place Visconti narrates that the discoveries consisted of an urn preserved in a pitcher and accompanied by vases and pans; which he afterwards confirms, observing that the jar contained, besides the funeral urn with a small vase inside, nine vases and three pans. This statement is moreover complemented by the observation that in one of these jars containing the funeral urn was placed a little figure of *creta cotta*, the rudeness of which, as an indication of its high antiquity, makes it the more precious; and by the statement that in another of the same urns were placed, besides the ashes and burnt human bones, a *fibula* and a small wheel of bronze.[b]

These accounts of the particular kind of tombs of our necropolis receive confirmation from what is stated in the subsequent description given by Blacas. In one of the funeral urns preserved by that excellent archæologist there existed

[a] Notices of the hut-urns occur in the following works:—Inghirami, *Monumenti Etruschi o di Etrusco nome*, serie vi. tav. 4 D. Birch's *History of Ancient Pottery*, ii. 196. *Bullettino dell' Instituto di Corrispondenza Archeologica di Roma*, 1846, p. 94. Mr. J. Beldam's paper on *Pelasgic and Latian vases, &c.* in the *Archæologia*, xxxviii. 189. Baron de Witte, *Gazette des Beaux Arts*, 1851, p. 51. Baron de Bonstetten, *op. cit.*

[b] Visconti, *ubi supra*, pp 19—26.

originally, besides the ashes and some remains of burnt bones, fragments of earthenware and sundry bronze objects, and a human figure in *creta*.

However imperfect may be the preserved descriptions of the tombs discovered beneath the *peperino* of Castel Gandolfo, sufficient remains to enable us to understand their character, and to compare them with the similar ones which have been discovered in other cemeteries of Italy; of these there are three which exhibit funeral rites identical with those of the people of the Pascolare, and present objects similar to those of the first-mentioned discovery, indicating thus the same epoch, and that there existed different families, scattered throughout Italy from the Alps to Rome, possessing similar customs and perhaps a common origin. Of such sepulchres the first is that of Golasecca, near the southern extremity of the Lago Maggiore, described by Giani; the second that of Santa Maria delle Caselle in Villanova in the Bolognese, described by Gozzadini;[b] and the third and last that discovered in the sub-soil of the city of Bologna, and also described by Gozzadini.[c] Exact comparisons of these may assist us in determining the epoch of the existing tombs near Castel Gandolfo.[d]

At Villanova, within a cist of rough unworked flint stones, was found a large funeral urn containing the remains of burnt human bones, together with some objects in earth and bronze. Around the cist were placed in the usual manner sundry vases of different forms and sizes; these were for the most part empty, but in rare instances contained objects in clay and metal. Such briefly is the general character of the tombs at Villanova, which it is easy to perceive resemble in their general character those of the sepulchre at Pascolare.

Very similar are the tombs excavated in Golasecca. There also was found a cist of stone, and near it some accessory vases. Besides this, now and then, as in the Pascolare and at Villanova, a small vase was placed in the urn, or, instead of that, the urn contained *fibulæ*, or bracelets of bronze.

In respect to the third sepulchre, that of Bologna, the resemblance which it bears to the necropolis of the Pascolare is not less marked than that of the preceding ones. Gozzadini, giving the description of two of the Bolognese

[a] *Op. cit.* page 4.

[b] *Di un sepolcreto Etrusco scoperto presso Bologna.* Bologna, 1855.

[c] *Di alcuni sepolcri della necropoli Felsinea.* Bologna, 1868.

[d] Dr. Pigorini has arrived, in regard to the epoch of the Pascolare of Castel Gandolfo, at identical conclusions to those which the reader will find set forth in the course of the present dissertation. *See* The *terremare* and the *palafitte* of the Parmense. (Second communication of Prof. P. Strobel and of L. Pigorini.) Milan, 1864, p. 94.

sepulchres, says of the first,[a] that it consists of a large ossuary of white clay, identical with that found at Villanova. It contained the remains of burnt human bones, the blade of a knife of iron, and two *fibulæ* of bronze. It had around it also small vessels of clay, and sundry other objects.

With this short notice, which, however, we thought ought not to be omitted, of the position and the construction of the cemetery[b] which is the subject of this dissertation, as well as of the resemblance which it bears to those of Villanova, of Golasecca, and of Bologna, we proceed now to describe separately the objects excavated from beneath the *peperino* of the Pascolare, and figured in the accompanying plates.

For greater clearness we will divide the reliques collected from the necropolis of the Pascolare into groups, according to their material, and in illustrating them will take first—

The Earthenware Vessels.—The Etruscan Museum of the Vatican contains one of the large vases within which was placed the funeral urn, together with some other objects, as appears in the plate given by Visconti. Large vessels of the same form occur in the other tombs supposed to be contemporaneous with that of Pascolare, and more particularly in the necropolis of Villanova[c] and that of Bologna.[d]

The Etruscan Museum of the Vatican possesses no fewer than 36 vases, more or less like those figured in Plate IX. figs. 1—3. They are of various heights, from 29 to 40 cents., larger in the middle, and contracted at the mouth and at the bottom, presenting therefore the form of two cones placed one on the base of the other. They had no feet, and it is to be noted they are usually

[a] *Di alcuni sepolcri*, etc. p. 4.

[b] Visconti, in his Memoir so frequently referred to, has given a drawing to exhibit one of these singular interments of the Pascolare, restored in accordance with his very careful observations. He shows a vertical section of the large two-handled wide-mouthed jar, with perspective sketches of its contents. In the centre (standing, it would seem on a layer of earth, which fills about one-fifth of the jar, so as to give more room than the narrow bottom would afford) is the hut-urn (described *post* p. 12, No. 4), containing a small wheel, a very small cup, and two other objects, one apparently a fibula. Around this hut-urn are grouped a number of the earthen vases subsequently described in detail in this Paper, and of which we have figured the typical specimens. This drawing, which is not very artistic, has been reproduced both by Blacas and De Rossi in their respective memoirs, and will also be found, on a reduced scale, in Birch's *Hist. of Ancient Pottery*, ii. 197. Gozzadini's figure (*Di alcuni sepolcri*, p. 10, fig. 6) of one of the sepulchres of the Bolognese necropolis should be compared with Visconti's drawing.

[c] Gozzadini, *Di un sepolcreto*, etc. tav. ii. 2.

[d] *Di alcuni sepolcri*, etc. p. 10, fig. 6.



HUT-URNS AND VASES FROM MARINO

furnished with a single handle. One only has two handles. Generally the lip and the handle are plain, and in almost all cases the middle is ornamented with elegant lines. The handle is generally smooth, but in some it is fluted (fig. 2) or ornamented with patterns. The same is to be remarked of the lip, which, though for the greater part plain, is sometimes ornamented. One of the vases (fig. 1) is entirely divested of any ornament, except that afforded by a bold channeled band worked round the middle, or widest part. In another instance the vessel has a perfectly plain surface throughout.

The discoveries at Pascolare do not afford any evidence as to the use of these thick vases. We think it however not difficult to determine this point by means of an exact comparison which we are enabled to make with some of the vases from Villanova [a] and Bologna,[b] perfectly identical with the first-named in material, in form, in colour, in style, and lastly in the varied and elegant patterns with which they are ornamented.[c] The latter have, besides, like those of the Pascolare, a single handle, sometimes smooth[d] and sometimes fluted,[e] which serves to demonstrate the identity between them.

Gozzadini, who has made the most minute observations upon the cemeteries of Villanova and Bologna, has been able to ascertain the use of the vases here described. He shows most conclusively that they were funeral urns.[f] But this does not prove that the vases found in the tombs of the Pascolare were deposited for the same purpose, nor is it possible to understand in what manner they were originally deposited. We may hope that new and more fortunate discoveries made on the breaking-up of the *peperino* will remove all doubt on this subject.

The most remarkable funeral urns of the Pascolare however are those shaped in the manner of a hut, as shown in Plate IX. (figs. 7-9). Almost all the writers who have occupied themselves with the subject of our tombs have confined their description to the singularity of their form. There are not many specimens now in existence of these funeral vessels made in the shape of a hut. The following brief list embraces all which we know of.

1. An urn now in the Etruscan Museum of the Vatican, described by Visconti [g] and by Bonstetten,[h] and engraved in our Plate IX. fig. 7. This urn is in form perfectly cylindrical, with a diameter of about 30 centimètres: the walls are entirely smooth, and measure 16 cents. in height, on which is placed a roof of 10

[a] *Di un sepolcreto*, etc. tav. ii. 1, 9, 11. [b] *Di alcuni sepolcri*, etc. p. 11, fig. 7.
[c] *Di un sepolcreto*, etc. tav. ii. 7. [d] *Ibid.* tav. ii. 11. [e] *Ibid.* tav. ii. 1, 9.
[f] *Ibid.* p. 8. [g] *Op. cit.* tav. ii. 1. [h] *Op. cit.* tav. xvii. 1.

cents.; the opening intended to represent the door is 11 cents. high by 14 cents. broad. There are six columns, three on each side, adhering to the walls, and which, rising from the base of the hut, have their termination or capital immediately under the roof. In two of these columns, on each side halfway from their base, there is a transverse aperture, through which passes, as we shall see in speaking of figure 9, a rod of bronze, intended to bar the door. Four beams form the support of the roof, which, fixed at their lower extremity in the walls of the hut, cross one another at the top. Upon the roof are figured in relief two windows, the one over the door, the other opposite. In addition the inside of the roof is ornamented with patterns which are symmetrical in part only, and which have been considered to resemble runic characters.

2. An urn (Plate IX. fig. 8), also in the Vatican Collection. This specimen is in form somewhat oval, with a smaller diameter of 25 cents. and a larger of 30 cents. The walls measure 14 cents. in height, and the roof has a height of 10 cents. The aperture which serves, as in the preceding, to represent the door is 11 cents. wide and 12 cents. high. There stand on each side two columns higher than the walls to which they adhere, and somewhat bent at the top. One of these on each side has the before-mentioned transverse opening, within which remain the fragments of a bronze needle, which served instead of a bolt to secure the door of the hut. In this second urn also four beams form the support of the roof, and, like the preceding one, it has two windows figured on it, and above them two openings.

3. A funeral urn, represented in Plate IX. fig. 9, first published by Blacas.[a] Since we have not had the opportunity of examining it ourselves, we think it convenient to quote the exact words used by De Blacas.

"The most remarkable of all these vases, and that which merits most our attention, represents a hut or cabin. We recognize perfectly the joists of the roof with two windows, one on the side of the entrance and the other opposite. In the place occupied by the door the cover or defence is maintained by a brass thread penetrating like a bolt the little round holes skilfully made. . . . The total height of the vase is 23 and the circumference of the base 72 cents."

4. Another hut-urn, of which we do not think it necessary to give a figure, is of a cylindrical form. It measures at the base a diameter of 25, and then tapering upwards diminishes to 5 cents. The walls have a height of 15 and the roof 9. The door is 12 cents. high, and broader at the threshold than at the

[a] *Op. cit.* tav. ii. and p. 3.

architrave, being 15 cents. at the bottom and 11 at the top. Surrounding it is a band intended to represent the column of the previous ones and the architrave; in the column are wanting the holes before noticed. The support of the roof is formed of three beams only on a side, and in it, as usual, are two windows with a circular hole over.

5. A fifth urn is an oval hut with a large diameter of 26 cents. and a smaller of 17. The walls have a height of 12 cents. and support a roof of the height of 9. The door is 10 cents. high, and 12 cents. broad at the bottom and 10 at the top. Two columns form the support, provided with the accustomed openings. The support of the roof is composed of six beams, three on each side; and in the roof recur the two windows, one opposite the other, having an arched form, whilst those of the preceding urns are more square.

6. Of the sixth we are not able to give so exact a description as of the others. Unfortunately we have lost the notes taken in Rome concerning this vessel, but we may mention that the proportions of it are almost identical with those of the others of which we have been speaking.

7. A seventh hut-urn differs somewhat from the common type of the other urns which we have described. The continuity of the walls with the roof gives it the appearance of a half sphere. It is oval, with a larger diameter of 24 and a smaller of 21 cents. and in its greatest height reaches 18 cents. The door, which although broken is not more than 7 cents. high, is ornamented around with a band intended to represent the threshold and the architrave. The front is provided with the usual holes to fasten the door, and upon the roof appear six beams, three on a side, crossing at their higher extremity. This urn, as well as the three last-mentioned, is in the Etruscan Museum of the Vatican.



8. The accompanying woodcut is from another hut-urn, probably from Albano, and now in the possession of Mr. Oldfield, to whom we are indebted for permission to have it figured. The ornamentation differs in some respect from that of any of the others, and there is a row of holes over the doorway.

9. Closely resembling Mr. Oldfield's specimen is the hut-urn figured by Dr. Birch in the second volume of his work already quoted, at p. 196. He informs us that it is in the British Museum, to which institution it was presented by the late Mr. W. R. Hamilton.

These curious vases having the form of a hut must represent the description of house in use at the time when these urns were made.[a] We know for the rest also that the population living in Northern Italy, and with which are associated the *terremare* of the bronze epoch in the province of Emilia, a little earlier than that of the Pascolare, dwelt, as we shall see in the course of our memoir, in huts of a form more or less circular. One of the writers, in fact, obtained from one of the above mentioned *terremare*, pieces of the plaster of a hut of a round form,[b] identical with those of the Helvetic lacustrine habitations of the bronze epoch,[c] and hence contemporaneous with the *terremare* in question.

Plate X. fig. 1, represents a rude human figure, naked, and about 16 cents. in height. The feet and the left hand are wanting, but it is evidently intended to represent a man. In the face it bears no trace of a mouth, whilst the eyes, the nose, and the chin are distinctly marked. The ears are very badly represented, although not wanting. The right hand, the only one that remains, was formed by a simple compression of the extremity of the arm when the material was still soft, so as rudely to represent a wrist. The breasts are very prominent, although the figure is intended to represent a man, as will be seen from the other indications of sex. All the rest of the body is of the rudest execution, with the most monstrous proportions between the several parts. This statuette is in the Etruscan Museum of the Vatican, and was figured and described by Visconti,[d] as well as by Bonstetten.[e]

There is also in the same collection another figure identical with the preceding, both in material and in execution as well as in height. As it has the breasts more distinct than that of the preceding figure, and exhibits no trace whatever of male organs, we believe that it is intended to represent a woman.

In illustration of these figures we are only able to add, upon the authority of Visconti, that one of them was found in the large jar containing the funeral urn; which circumstance however neither proves it to be intended to preserve the likeness of the person to whom the ashes inclosed in the urn belonged, nor yet to be an idol, as Bonstetten supposes.[f] These figures however are specially

[a] Such is the opinion of Bonstetten, Ampère, and Blacas. [b] Strobel and Pigorini, *Op. cit.* p. 79.
[c] Troyon, *Les Habitations Lacustres des temps anciens et modernes*, table xii. 37.
[d] *Op. cit.* tav. iv. 3. [e] *Op. cit.* tav. xvii. 2. [f] *Op. cit.*



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interesting when considered in an artistic point of view, exhibiting the first steps in the sculptor's art in Italy. For the rest, the discovery of human figures and of animals in sepulchres contemporaneous with that of Pascolare and Castel Gandolfo, is no new circumstance in this country, nor yet to meet with them of the same rude character as those collected from our cemeteries. Not to mention also that in the tombs of Golasecca, Villanova, and Bologna,[a] there are to be observed upon the vases representations which in their character closely resemble the human figures above described.

Plate X. fig. 4.—A vase in the Royal Archæological Museum of Parma, 19 cents. in height, with a lip 13 cents. in diameter. In the cemeteries of Golasecca and of Villanova similar vases have not been met with. One only derived from the latter place approaches it very much in the height of the foot and neck, and breadth of the body,[b] but it is without handles, whilst the vase which we figure was originally furnished with two.

Plate X. fig. 2.—In this figure is represented a cup, with a diameter of 18 cents. and a height of 10 cents., ornamented in elegant patterns and furnished with a handle. It is in the Archæological Museum of Parma. Cups identical in form and in character of ornamentation abound in the necropolis of Villanova.[c]

Plate X. fig. 5.—This vase, which is of the same type as those represented in figures 1, 2, 3, (Plate IX.) is in the Etruscan Museum of the Vatican. It is ornamented with elegant patterns, and has a height of 18 cents. with a diameter of 9 cents. in the lip, and of 15 cents. in the middle. We think we shall not err in pronouncing it to be merely a small funeral urn of the kind represented in the before-mentioned figures 1, 2, 3 (Plate IX.) Gozzadini has discovered in Villanova[d] also, and in Bologna,[e] funeral urns much like this one both in form and size.

Plate X. fig 3.—A spherical vase with a straight neck and elongated in the shape of a bottle. It is preserved in the Archæological Museum of Parma. It is 13 cents. in height; in the middle it is about 11 cents. diameter. Vases of this style have not been found in Golasecca, Villanova, or Bologna.

Plate X. fig. 6.—A nearly spherical vase now in the Vatican, and intended like the preceding to serve as a bottle. In Italy it would at present appear that this form belongs exclusively to the necropolis of Pascolare. From the foot to the lip it measures 15 cents.; it is ornamented with *Greca*, and is furnished in the centre of the upper part with a loop for suspension.

[a] Cf. *passim* the plates of the works cited by Gozzadini and Gian[i].

[b] Gozzadini, *Di un sepolcreto*, etc. tav. iv. 32.

[c] *Ibid.* tav. ii. 5, 11.

[d] Gozzadini, *Di un sepolcreto*, etc. tav. ii. 12, 16.

[e] *Di alcuni sepolcri*, etc. p. 11, fig. 7.

Plate X. fig. 8.—The two preceding vases are related to that which is presented in the present figure, representing a vessel now in the Etruscan Museum of the Vatican. The bands which ornament the middle only are in relief; it measures 12 cents. in height, and has in the middle a diameter of 9 cents.

Plate X. fig. 7, belongs to the necropolis with which we are now occupied, in which vases figured like the present are very common. They are ornamented with bands in relief placed about them in the shape of a net, and executed with great rudeness. Fig. 7 is provided with a lip, and is 14 cents. in height, with a larger diameter of 12 cents. Another is without a lip and measures 16 cents. in height, with a larger diameter of 15 cents. They are both in the Etruscan Museum of the Vatican; but similar ones excavated from the tombs of the Pascolare are to be seen in several collections, and descriptions have been published as well by Bonstetten[a] as De Rossi.[b]

Another vase, now in the Etruscan Museum of the Vatican, 12 cents. high, and 15 cents. broad in the middle. It has a single handle, and bears upon its middle three highly ornamented excrescences. We have not a specimen identical with this either in Golasecca, Villanova, or Bologna, but similar ones abound in the *terremare* in Emilia, of the bronze epoch.

Plate X. fig. 11.—The vase represented in this figure is remarkable on account of its shape and the square form of its foot. The interior of the vase has a total height of 14 cents. of which the foot measures seven. It is furnished with two small handles, and between the two placed in the middle appears an excrescence with some lines in relief. It is in the Etruscan Museum of the Vatican, and no other similar one has until now been discovered.

Plate X. fig. 14.—This vase has a very peculiar handle. It is about 8 cents. high, with a diameter in the middle of 10 cents. It is preserved in the Etruscan Museum of the Vatican. Blacas,[c] Bonstetten,[d] and De Rossi,[e] mention similar vases from the same locality as that described by us.

Another small vase exists in the Archæological Museum of Parma, 4 cents. high, with a diameter of about 5 cents. The shape of the handle recalls exactly that with which the vase described under the preceding number is furnished.

Plate IX. fig. 6.—A small vase in the Archæological Museum of Parma, 5 cents. high, with a diameter of ·045 mètres. It has in the side a hole pierced so that it may be suspended by means of a small cord.

[a] *Op. cit.* tav. xvii. 7.
[b] *Op cit.* fig. 26, 27.
[c] *Op. cit.* tav. iv.
[d] *Op. cit.* xvii. 3.
[e] *Op. cit.* fig. 38.

In the Archæological Museum of Parma is another small vase 6 cents. high, with a diameter of 5 cents. It is without any kind of handle. There is a second small vase in the same collection, about 6 cents. in height, with a diameter of 5 cents.

Plate X. fig. 10.—A vase almost spherical in shape, ornamented with four excrescences, 8 cents. high, with a diameter of about 9 cents. This is in the Etruscan Museum of the Vatican.

We have no vases from Golasecca, Villanova, or Bologna, identical with those described under the figures 6, Plate IX. or 10, Plate X. In Villanova, however, some earthen vessels have been discovered[a] which in respect to their size and their perfection of art may be classed with those of the Pascolare described in the numbers 58 and 62. We may also remark that similar ones occur in the *terremare* of Emilia, of the bronze epoch.

Plate IX. fig. 5.—Tazza of 9 cents. diameter, 5 cents. high, furnished with three feet. It is in the Etruscan Museum of the Vatican. In the necropolis of Marino several tazze similar to this have been found, and another of very similar character, but in which the three feet are wanting, has been discovered in Villanova.[b] The Vatican also contains a goblet 5 cents. high, with a diameter of about 9 cents. furnished with feet. We believe we are not in error in describing this vase as a drinking cup. In the necropolis of Albano similar vessels of various dimensions have frequently been found. They also occur with some variety of shape and size in the sepulchres of Golasecca[c] and Villanova.[d]

Plate X. fig. 15.—This vase is peculiar to Albano; it exists in the Etruscan Museum of the Vatican. It is composed of three small vessels joined together, and communicating between themselves by means of a hole. Two are broken, but to judge from that which remains entire, each vessel must have had a diameter of about 6 cents. and a height of about 4 cents. They are ornamented with knobs and lines in relief.

Plate IX. fig. 17.—The curious lamps, of which we present an example in the present figure, are also peculiar to the necropolis of Albano. The one engraved is 15 cents. long in the inside and about 7 broad, and is furnished with four feet. This is in the Etruscan Museum of the Vatican. A second broken one 7 cents. broad, with a length of 13 cents. and possessing four feet, is preserved in the Archæological Museum of Parma.

Blacas[e] and Visconti[f] describe lamps from our necropolis perfectly identical with the above.

[a] Gozzadini, *Di un sepolcreto*, etc. tav. iv. *passim.*
[b] Gozzadini, tav. iv. 15.
[c] Giani, *op. cit.* tav. iv. *passim.*
[d] *Op. cit.* tav. iv.
[e] Gozzadini, tav. iv. *passim.*
[f] *Op. cit.* ch.—4.

Plate X. fig. 16.—Served in all probability also for a lamp. This and another similar object are in the Etruscan Museum of the Vatican: the one figured has a rounded form, and has a diameter of 10 cents. and a height of about 3 cents.; the other, with proportions a little different from the first, presents rather an oval shape.

A somewhat similar lamp has been found in the *terremare* at the Convent of Castione, in the present province of Parma.[a] This lamp is at the present time preserved in the archæological collection of the Stabilimento Balneario di Salso Maggiore, situated in the province of Parma, and is of much interest, as the *terremare* in which it was found appears to have belonged to the bronze age.

Plate X. figs 12 and 13.—Represent some peculiar utensils from the tombs of the Pascolare at Albano, now in the Etruscan Museum of the Vatican. An account of them has been already given by Visconti,[b] Blacas,[c] and de Rossi.[d] The lower part of fig. 12 is square in section, each side being 11 cents. wide, the section of the upper funnel-shaped portion being circular; the lip has a diameter of about 9 cents. Upon each of the four columns which ornament the angles of the lower half stands a saucer, and three of these have an aperture on the exterior, on the fluting with which the columns are furnished. The four sides of the base are perforated, and on each side are variously arranged tracings, &c. by way of ornament. The entire object is altogether empty, and without a bottom.

The second of these utensils (fig. 13) was probably intended for the same use as the preceding. Like this it has a height of 11 cents. with a diameter of about 7 cents. in the lip. It differs from the first in this, that the lower half is not square, but cylindrical. In this specimen again the lower half is furnished with four columns, each surmounted by a capital in the shape of a saucer. In the four divisions which occur between the columns are some ornamental patterns.

The circumstance of these utensils being without a bottom, and in both instances having all four sides of the base perforated, leads us to the conjecture that they were used as stoves, and placed in all probability over a brazier, so that if a vesssel containing liquor was placed on the lip it could be subjected at will to the action of heat.

Plate IX. fig. 4.—In the Etruscan Museum of the Vatican are preserved five small objects of clay, identical with that represented in this figure. They measure about 3 cents. in length, and are of a beautiful black colour. Neither Gozzadini nor Giani have observed in the necropolis illustrated by them anything which can be compared with these objects.

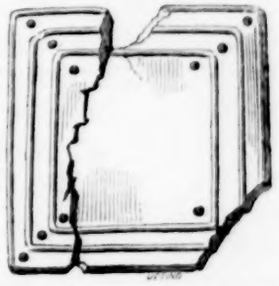
[a] *Nuova Enciclopedia popolare Italiana, supplemento perenne*, tom. ii. p. 806 and 2a.

[b] *Op. cit.* tav. ii. 2, 3. [c] *Op. cit.* tav. v. [d] *Op. cit.* i. fig 30 of the table.

We are unable to give any opinion in reference to the use of the object shown in the annexed woodcut. The upper extremity is broken, and what remains measures about 6 cents in length. Spreading below, it terminates in a square concavity 3 cents. in size. This type is, up to the present time, peculiar to the necropolis of the Pascolare and Castel Gandolfo.



With no greater certainty are we able to pronounce upon the use of the small object figured just below. We may mention only that it is a thin square, about 6 cents in size, ornamented with patterns. Similar ones, so far as is known, have not been met with.



Having thus described the various earthen vessels of the Pascolare, and noted at the same time those others found at Golasecca, Villanova, and Bologna, bearing any comparison as to form, we are desirous to add a brief analysis of their composition, instancing also in this respect any parallel discoveries which have been made in other parts of Italy.

Visconti writes, in the first place,[a] that "the material, the manufacture, and the colour of the earthenware of the Pascolare, present a relic of a former age which differs from all other earthenware hitherto known;" to which he afterwards adds, "that their material, according to the analysis, and their form, clearly indicate that they bear no relationship to those of the Roman sepulchres." The analysis referred to by Visconti[b] is that of the chemist Alessandro Conti, and we here re-publish it.

"The material of the ancient earthenware found in Albano differs from other common clay, by the addition of a certain quantity of volcanic sand, in accordance with the custom perhaps of those ancient potters, and affords upon analysis for every 100 parts,

Silica	63 per cent.
Alumina . . .	21 „ „
Carbonate of lime . .	4 „ „
Water	10 „ „

Blacas, at page 6 of his before-mentioned dissertation, says upon this point: "La matière employée à la confection de ces vases est une argile noirâtre mêlée de sable volcanique." To which we should like to append what has been expressed by Bonstetten, a most pertinent and reliable authority; he says, "La haute antiquité de ces poteries fut ainsi parfaitement démontrée, d'ailleurs la grossiereté de leur travail, la bizzarrerie de leur forme, et la composition de leur

[a] *Op. cit.* p. 5. [b] *Ibid.* p. 31.

pâte, dans laquelle on reconnut encore des traces de cendres volcaniques, indiquaient déjà que ces urnes n'étaient ni Romaines ni Etrusques."[a]

The preceding statements, quoted from the memoirs of Visconti, Blacas, and Bonstetten, fully confirm our own observations upon the nature of the material of the earthenware with which we are occupied. It may be added that the vessels in question present three descriptions of material. The first is pure clay, mixed with volcanic sand, grains of which are in some instances visible in the fractures; the second is clay mixed with sand, before described, but of a paler kind, and hence purer and finer; the third, in other respects not unlike the second, contains a large quantity of a material, apparently carbonaceous, which imparts to it a beautiful black colour.

We are unwilling to prolong the subject to an undue length by a comparison of the earthen vessels of the tombs of the Pascolare with other similar ones found in different places in Italy. We shall only remark, in passing, that the vessels of the *terremare* of the bronze epoch[b] present on the whole a remarkable resemblance to the pottery collected from the burial-places of Golasecca, Villanova, and Bologna.

Of this circumstance it is necessary to take account, in order to arrive at a satisfactory conclusion as to the age to which our necropolis belongs. The pottery differs in fact merely as to the quality of the mineral mixed with the clay, and this is only natural, because the volcanic matter introduced in the manufacture of the pottery of Albano was very different to that employed for the same purpose by the people of Bologna, Villanova, and Golasecca. Our researches have enabled us to ascertain this fact, viz. that all the earthenware of this last named necropolis, as well as the necropolis of Pascolare, presents in the fractures identical characteristics as to the description of their paste.

Such being the result of a comparison of the vessels here illustrated, in so far as relates to their shape and the material of which they are composed, we have still to offer some remarks as to the mode of their manufacture and the process of baking. The earthenware vessels of the *terremare* of the bronze epoch are in all cases made by hand, and never appear to have been subjected to the heat of a closed oven; on the other hand, those of the necropolis of Bologna were made ordinarily by means of a potter's wheel and baked.

The vessels of the Pascolare at Albano very closely resemble the vases of the *terremare* in Emilia belonging to the bronze period; as, for the sake of example, the vases of which we have engraved a specimen (Plate IX. fig. 6). For the rest, it must be borne in mind that in the greater number of cases the baking and the mode of manufacture are the same as well in the vessels of the Pascolare as in the other cemeteries.

[a] *Op. cit*

[b] Strobel and Pigorini, *op. cit.* p. 80 seqq.

That which more than any other circumstance serves to establish an almost perfect identity in the art of the pottery illustrated in our figures and that of the vases from Golasecca, Villanova, and Bologna, is the ornamental patterns with which both the one and the other are adorned. In the vessels of the *terremare* this mode of ornamentation also occurs; but the style, the composition, and the rude execution of the latter, characterise them as more ancient than those of which we have given figures.

To sum up however in short what we are able to add upon this subject, we may say, that, so far as the evidence justifies us in forming an opinion, the vessels of the Pascolare, compared with those of the *terremare* of the bronze epoch, in respect to their composition, their baking, their shape, and their ornamentation, appear to be somewhat posterior, resembling most those of the sepulchres of Golasecca, Villanova, and Bologna; to which, however, they may perhaps be regarded as a little anterior, from the circumstance that they possess some points of connection with the *terremare* of Emilia of the bronze period, which have never been observed, at least with any distinctness, in the vases of Bologna, Villanova, and Golasecca.

Bronzes.—The bronzes discovered in the necropolis of Pascolare, of which we have any account, are reduced to few in number, and the greater part of them have unfortunately been lost. Following the course adopted by us in treating of the pottery, we proceed to give the description of such of these objects as we have been enabled to figure.

The first object to be mentioned is a spear. The specimen itself having been unfortunately lost, we shall only remark that it does not appear to have differed from the type of those used in the bronze age, which was of simple form, as remarked by Visconti at page 30; and that it is the only one known to us obtained from the Italian sepulchres, which, as we have seen, appear to be, with some slight differences, contemporaneous with that of the Pascolare at Albano.



The two objects represented in the margin are small bronze knives. This type of knife, which so much abounds in the lacustrine habitations of Switzerland, is on the contrary extremely rare in the pre-historic deposits of Italy, insomuch that, besides the two here presented, we are only able to record one, discovered in the pilework of the Lago di Garda, published by Sacken,[a] and another similar found in the province of Reggio

[a] *Der Pfahlbau im Garda*; p. 22, fig. 11.

d'Emilia, and preserved in the Civic Museum of that city. As in the case of the spear previously described, the two knives under description have also been lost, and we are only able to vouch for their discovery on the faith of Visconti.

The object engraved below was first published by Visconti;[a] Blacas has engraved



two others.[b] We are not in a position to offer any explanation of their use, for the reason that, besides not having been able to examine them, they offer here no point or feature on which to institute a comparison. They present the appearance of a style for writing, with a portion of the tablet threaded on the style; whence the supposition that they were used for writing on tables of wax. The opinion of Visconti is shared by Blacas, who pronounces this object "un style et une petite plaque du même metal (de cuivre.)"



In the necropolis of Albano have been discovered bronze *fibulæ*, and we reproduce in the woodcut a drawing of one preserved in the Blacas collection, and published by Blacas himself.[c]

In the cemeteries which we have seen to be connected with that of Albano there have also been met with sundry *fibulæ* which exactly agree with those just mentioned.[d] Moreover it is to be remarked that in Italy, as in Switzerland, the habitations of the true bronze epoch are absolutely devoid of *fibulæ;* yet similar *fibulæ* have been recovered in some Italian deposits of the close of the same epoch, for instance the *fonderia* of .Casalecchio near Rimini,[e] and the pile-dwelling of the Lago di Garda.[f]

We may notice lastly, among the objects of bronze recovered from the necropolis of the Albano, a spiral ring figured by Blacas.[g] This author does not give us an exact description of the ring in question, but the

[a] *Op. cit.* tav. iv. 4.

[b] *Op. cit.* tav. iii. 4.

[c] *Op. cit.* tav. i. 2. This fibula, it should be observed, has not found its way into the British Museum with the rest of the collection of the Duc de Blacas.

[d] Gozzadini, *Di un sepolcreto*, etc. tav. viii. Giani, *op. cit.*

[e] Luigi Tonini, *Di alquanti oggetti Umbri od Etruschi, nella maggior parte in bronzo, trovati di recente in una villa del Riminese*, p. 8. Annuario scientifico ed industriale Italiano, di Grispigni e Trevellini. Anno iii Paleoetnologia.

[f] *Op. cit.* p. 30, fig. 38.

[g] *Op. cit.* tav. iii. 3.

figure of it enables us to find a duplicate as well in Gozzadini[a] as in Giani,[b] and from this comparison to affirm that this style of ornament was used not only by the people who have bequeathed to us the tombs of the Pascolare, but by those also to whom we are indebted for the sepulchres of Golasecca and Villanova.

Other objects in bronze have been discovered in the necropolis of the Pascolare of Castel Gandolfo; but these having been lost, and no figures of them having been presented by Visconti in his plates, we are unable to present figures of them to our readers. But we may record certain small wheels mentioned by Visconti in page 26 of his memoir; and which appear in his sketch of the restored sepulchre. Visconti believes them to represent the wheels of a car or wagon, which from their size were not capable of being put originally in our sepulchres.

For our own part we think it as well to state that it is not possible to determine their use, adding that one of us has been in correspondence with Professor Strobel[c] on the subject of similar objects found in the *terremare* of Emilia belonging to the bronze epoch."[d] It has been suggested that the objects in question were used for ornaments for the hair.[e] Wheels of this description are met with habitually in the *terremare* of Italy. But the fact that Gozzadini has not found any in the necropolis of Villanova must not be passed over in silence.

To judge with greater exactness of the bronze objects discovered in it, the necropolis of Pascolare must be associated partly with the *terremare* of the bronze epoch, and partly with the necropoli of Villanova and Golasecca, which, as has been mentioned, and we shall have occasion to repeat hereafter, are probably posterior to the *terremare* in question. Of these objects we consider the spear, the daggers, and the wheel before mentioned to be referable to the bronze age. The *fibulæ* and the spiral ring are types generally regarded as belonging to the iron age. The *fibulæ* are not met with in the lake habitations of the bronze epoch, nor in the *terremare* contemporaneous with them. They occur however in the deposits of the following or iron age.

The combination therefore of objects found at Albano would appear to denote that they belonged to the close of the bronze age, or the commencement of the iron epoch. This will be made still more manifest in speaking of the age of the sepulchres of Golasecca, Villanova, and Bologna, with which we have seen that of Pascolare is closely connected.

Various objects.—By way of complement to the notices of the objects

[a] *Di un sepolcreto*, etc. tav. vii. 7. [b] *Op. cit.* tav. vi. 3. [c] Strobel and Pigorini, *op. cit.* p. 112.

[d] Strobel, *Avanzi preromani raccolti nelle terremare e palafitte dell' Emilia*, tav. ii. 12, 13; iv. 23.

[e] Cavedoni, *Cenni archeologici intorno alle terremare nostrane.* Modena, 1865, p. 6.

collected in the tombs of the Pascolare of Castel Gandolfo, it is necessary to record, that together with them were deposited beads of light blue glass and of amber, as we are at least assured by Tambroni.[a] Amber is found to have been used by various peoples of the bronze age, but the glass specially coloured and used as enamel appears to have been unknown at that period. The lacustrine habitations and the *terremare* are entirely without it.

On the other hand we find it used by the people who have left to us the cemeteries of Villanova,[b] of Bologna,[c] and Golasecca.[d] Which fact also appears to indicate that the tombs of the Pascolare must be referred to the iron age, probably, however, to the beginning of it, as has been already indicated in the course of this memoir.

That the sepulchres of Albano were nearly contemporaneous with those of Villanova, Golasecca, and Bologna, having been in this way established, it becomes of course important that we should, if possible, determine their age, and the better to do this we append what has been carefully observed and described by De Mortillet[e] in refutation of the opinions of Giani and Gozzadini.

Gozzadini believes that traces of Etruscan art may be recognised in the reliques illustrated by him, and Giani considers his to be of Carthaginian manufacture. De Mortillet, more amply developing what had been already affirmed by Strobel and by one of us,[f] puts the question under its true aspect, and supports his conclusions with much learning and great ability.

Referring to the hypothesis of Gozzadini, De Mortillet says that he considers the necropolis of Villanova much anterior to the commencement of the peculiar Etruscan culture which has been illustrated in the "Italia Circumpadana." "En effet," he says, "les cent quatre vingt treize tombes de Villanova fouillées avec tant de soin, n'ont pas fourni le moindre débris de vases peints, de ces vases si caractérisques qu'on les désigne généralement sous le nom de vases étrusques. Pas même de ces poteries noires de la première civilisation étrusque. Pas de ces vases légères, courbées presque à angle droit, type si commun dans les poteries réellement étrusques. Pas de vases ou fioles en verre. Les idoles, si abondantes en Etrurie, font à peu près complètement défaut, M. Gozzadini n'en a trouvé qu'une seule. Pas d'écriture, simplement quelques rares signes ou chiffres sur quelques pièces. Point *d'æs grave* (?). Pas de bagues proprement dites, ou bagues à chaton. Les fibules, bien que très variées de forme sont géné-

[a] *Op. cit.* [b] Gozzadini, *Di un sepolcreto*, etc. tav. vii. 15, viii. 18, 22, 23.
[c] Gozzadini, *Di alcuni sepolcri*, etc. p. 14. [d] Giani, *op. cit.*
[e] De Mortillet, *Le signe de la croix avant le Christianisme*, p. 115-117.
[f] Strobel et Pigorini, *op. cit.* p. 94.

ralement a très longue agrafe; pas ou presque pas de fibules à agrafe courte et large abondantes dans les stations étrusques.

"Le cimitière de Villanova doit d'autant moins être considerée comme étrusque, qu'il offre tous les caractères qui l'on retrouve dans les terremares qui sont intermédiares entre les dépôts de l'époque du bronze et celles où l'on rencontre des traces certaines de l'occupation étrusque.

"Ce cimetière appartient donc dans son ensemble à cette époque intermédiare que nous designons simplement sous le nom de première époque du fer, pour ne rien préjuger sous le rapport historique."[a]

These learned reasons given for his opinion by De Mortillet appear to us to be sufficient for our object, because, knowing the same conditions to obtain in the case of Bologna and Golasecca, we are inclined to arrive at a like conclusion in respect to them also; however, in further confirmation, we will add the opinion of De Mortillet upon our argument: "En comparant les descriptions des tombes de Golasecca et de Villanova, on voit qu'on est en présence d'une même civilisation, d'une même époque;"[b] that being the commencement of the age of iron. De Mortillet is only silent on the necropolis because the first publication of Gozzadini in 1857 was unknown to him, and, as yet, the second had not been given to the scientific world.

What De Mortillet writes on the subject of the sepulchres of Villanova and Golasecca we are able to repeat in respect to that of the Pascolare of Castel Gandolfo. In conclusion, therefore, we may say that this last named necropolis like the others of Golasecca and Villanova, to which it is related, was probably constructed at the commencement of the iron epoch, and possessing, even beyond the other two, great points of connection with the *terremare* of the bronze period, must be regarded as a little anterior to them, and thus referable to the transition period between the bronze epoch, to which the *terremare* referred to goes back, and the first age of iron, during which the sepulchres of Villanova and Golasecca were constructed.

In concluding our notice it is only proper to mention that Gozzadini, even after the publication of De Mortillet, has insisted on the Etruscan character of the necropoli of Villanova and of Bologna, and avers that there have been discovered in them objects which are truly Etruscan;[c] also that Biondelli pronounces the sepulchre of Golasecca to be of Gallic origin. We must remember also that in Germany, as well as Italy, these urns were associated with objects of bronze.

[a] *Ubi supra*, p. 89. [b] p. 122. [c] *Di alcuni sepolcri.*

VII.—*Notes on the "Hwiting Treow" of the Anglo-Saxons.* *By* John Yonge Akerman, *Esq., F.S.A. Local Secretary for Berkshire.*

Read May 21st, 1868.

Tacitus, in his description of the ancient Germans, speaks of their reliance upon auguries and decisions by lot. The latter was performed with twigs cut from the branches of a fruit-bearing tree, and thrown upon a white garment:—"Sortium consuetudo simplex. Virgam frugiferæ arbori decisam in surculos amputant eosque notis quibusdam discretos super candidam vestem temere ac fortuito spargunt."—Germ. 10.

We find this ceremony described perhaps more in detail in the laws of the Frisians, after their conversion to Christianity, where, in the case of homicide in a tumult, two twigs, one of which was marked with the sign of the cross, were covered with clean wool, and then laid upon the altar or reliques:—

"Duo tali de virga præcisi, quos tenas vocant; quorum unus signo crucis dignosceretur, alius purus dimittitur, et lana munda obvoluti super altare seu reliquias mittuntur."—Leg. Fris. tit. xiv. 1.

The *tan* or twig was thus used by all the Northern nations, and, according to Herodotus, by the ancient Scythians.

In the legend of St. Andrew, an Anglo-Saxon poem, the use of the twig is thus described:—

Leton him þâ betweonum	They let among them
tân wîsian:	The twig decide:
* * * * *	* * * * *
* * * * * * *	* * * * * * *
Đâ se tân gehwearp	Then went the twig
efne ofer ænne	even over one
eald-gesiðða	of the old comrades.

The object of these remarks is to identify, if possible, a tree or trees the twigs of which furnished the *tan* used on these occasions here cited. Three trees at least had the term Hwiting applied to them by our forefathers, viz.:—

I. The lesser Lime, or Linden (*Tilia cordata*). The fact that the shields of the Saxons and kindred nations were formed of its wood, and that "lind" in their poetry stood for shield, is sufficient to justify the appellation.

II. The Rowan or Quick-beam, or, as it is popularly termed, the Mountain Ash (*Sorbus aucuparia*), and, in some counties, the Whiten-tree and the Witty. From this tree the Northern nations cut their rûn-stafas. Dr. Prior observes, in Popular Names of British Plants, p. 192:—

"Rowan or Roan-tree, called in the northern counties Ran or Royne, Da. and Sw. rönn or runn, the Old-Norse runa, a charm, from its being supposed to have power to avert the evil eye. 'The most approved charm against cantrips and spells was a branch of the Rowan-tree planted and placed over the byre. This sacred tree cannot be removed by unholy fingers.'—Jamieson's Scot. Dict. 'Roan-tree and red thread haud the witches a in dread.'—Johnston, in East Bord. The word runn, from Skr. ru, murmur, meant a secret. A rûn-wita was a private secretary, one who knew his master's secrets; and from the same word were derived rynan, to whisper, rûna, a whisperer—in earlier times a magician, and rûn-stafas,[a] mysterious staves. From this last use of the word the name "rûn" came naturally to be applied to the tree from which such staves were usually cut, as "boc" to that from which book-staves, boc-stafas, were made; but it does not appear to be ascertained why this tree should have been so exclusively used for carving runes upon, as to have derived its name from them, not only in the British Isles but in the Scandinavian countries also. There was probably a superstitious feeling of respect for it derived from ancient times."

The people of the North built their ships of this wood, and a walking-staff made of it was thought to protect the traveller from harm.

III. The Wayfaring-tree, Spindle-tree, Mealy Guelder Rose, Whiten-tree or Whiten-beam (*Viburnum Lantana*). Of this tree Aubrey says:—"Witty-tree, or Wayfaring-tree, is rare in this country; some few in Cranbourn Chace, and three or four on the south downe of the farme of Broad Chalke. In Herefordshire they are not uncommon; and they used, when I was a boy, to make pinnes for the yoakes of their oxen of them, believing it had vertue to preserve them from being forespoken, as they call it; and they use to plant one by their dwelling-house, believing it to preserve from witches and evill eyes."—Aubrey's Nat. Hist. Wilts, p. 56. This tree is universally known by the rustic population of the Southern, Midland, and Western counties by the last name here given, viz. the

[a] See the interesting dissertation on Anglo-Saxon Runes, by J. M. Kemble, in the *Archæologia*, xxviii. 307.

Whiten-tree or Whiten-beam. It is used in some parts of England at this day in the making of strong coal-baskets.

IV. The Dog-wood, or Cornel-tree (*Cornus sanguinea*). Dr. Prior tells us that Dog-wood should be written Dauk-wood, to "dauk" being, in the West-country dialect, to prick or stab. The word occurs in the old nursery rhyme: "Prick it and dauk it, baker's man." The term seems to be applicable to any kind of wood which could be made into skewers; hence the name Prick-wood, or Skewer-wood, which is sometimes given to it.

It will be seen at once by those who will take the pains to examine these trees that the one glossed by Ælfric thus, *Hwiting Treow, Variculus arbor*, is the only tree of the four to which the appellation can apply. It seems to me highly probable that this tree, conspicuous in the hedges in summer-time by its blossom and fruit, and in the winter by its blood-red stems, whence its name, is in reality the *Frugifera arbor* of Tacitus, and that the twigs cut from it were occasionally used by all the Northern nations. My opinion is founded on the evident fact that the appellation Hwiting is the generic term applied to any kind of wood that might be easily whittled or shaped into pins, pegs, or spindles, and the dog-wood or daukwood-tree is certainly of that character.

I have heard that the dogwood-tree has been sometimes called the whiten-tree, but have not been able to verify it. I forward branches of the whiten-tree and the dogwood-tree, each being *frugiferæ arbores*, in which a great dissimilarity may be observed. The dogwood-tree is still used extensively by butchers for skewers.[a] I may observe, in conclusion, that "to draw cuts" is, in the language of the rustic population, to draw lots.

[a] The term skewer-wood is given popularly to a tree known to the rustics as the catrash or catrush, perhaps from its having a green bark like a rush. It is preferred to the dogwood on account of its extreme hardness. It is also called spoke-wood, a term which seems to reflect the superstitious practice mentioned by Aubrey.

VIII.—*On the Centuriation of Roman Britain.* *By* HENRY CHARLES COOTE, *Esq., F.S.A.*

Read December 5th, 1867.

THE civilization which Western Europe received at the hands of Rome was due in great part to the colonies planted by her in every subjected portion of it. It may, therefore, be neither trivial nor uninteresting to inquire whether that colonisation extended itself and its benefits to this country also. Throughout the history of Rome conquest preceded colonisation. The land of a conquered nation, if the Roman government insisted upon its right, became the absolute property of the Roman people. Belonging from that time to the State, it could be retained by the Government as public property (*i. e.* in fact and etymology the property of the people,) to be used for the support and relief of the finances, or it could, by an act of the Legislature, be granted and appropriated to private individuals, of course a portion of that people or their privileged allies.

This latter course was constantly taken, for, as it was a leading idea at Rome to complete and perpetuate her conquests by the multiplication of Roman citizens and allies in the conquered countries, so this could be carried out effectually only by providing those transplanted citizens and allies with the means of a fixed and stable existence, in other words with settlements in land.[a]

[a] "Ut numerus civium, quem multiplicare divus Augustus conabatur, haberet spatia in quæ subsistere potuisset."—Hyginus in Lachman's edition of the *Gromatici Veteres*, 2 vols. 8vo. Berlin, 1848-1852, p. 113. [My subsequent references to the works of the various agrimensorial writers are to this edition, unless otherwise stated.] The consuls, in expostulating with the Latin colonies, laid down the same principle, "sed Romanos inde oriundos, inde in colonias atque in bello agrum captum urbis augendæ causa missos." —Liv. xxvii.c. 9. The colonists also were the advanced guard of Rome, protecting her extended frontier. So Horace says, Sat. lib. ii. 1 :—

> "Nam Venusinus arat finem sub utrumque colonus,
> Missus ad hoc, pulsis (vetus est ut fama) Sabellis,
> Quo ne per vacuum Romano incurreret hostis."

Or, as Tacitus expresses it, "Colonia deducitur in agros captivos, subsidium adversus rebelles, et pro imbuendis sociis ad officia legum."—Ann. xii. 31.

This resettlement of a country,[a] as it in truth was, was conducted upon a plan and a system worthy of that nation of statesmen. In the concrete, colonisation meant the foundation of a new city with an allotment thereto as and in the name of territory, the latter to be legally subject to the municipal authority of that city, and to be divided and assigned to the colonists in proprietary grants. This was a colony—in other words a renewal and reproduction of the original city in a strange land,[b] or, in the words of Michelet, "une extension de la métropole."

The aim of the Government being to deport a certain number of Romans, Latins, or Italians, the territory to be enjoyed by the colony would be an amount of land at least adequate to that numerical necessity. This would necessitate a previous survey, in order to obtain a knowledge of the acreage to be dealt with. The Roman Government would seem at all times to have possessed knowledge obtained in this way. Appian, in his Illyrica,[c] speaks to measurements having been made by Roman engineers of that country so accurate as to correct previous but less exact opinions. The *agrimensores* refer to a measurement of the whole

[a] "Causam autem dividendorum agrorum bella fecerunt. Captus enim ager ex hoste, victori militi veteranoque est assignatus, hostibus pulsis."—Siculus Flaccus, p. 155.

[b] It is consequently merely an error to suppose that colonies were sent to those cities only which in later days are found in possession of this name. Whenever land (*ager*) was *divisus assignatus* (to use the words of Frontinus, lib. i. p. 2), there was by necessity a colony, because that land was territory, and Romans, Latins, or Italians had received assignments of it under the express contract of settling upon them. This was the original meaning of the word *colonia*. Though in later days a meaning of municipal difference was attached to it, originally it had reference to the body of colonists, not to the city which they were to found, or to the territory which was to be assigned to it. The future city might be *municipium*, *forum*, *præfectura*, *conciliabulum* (see LL. Mamilia, Roscia, Peducea, Alliena, Fabia, in Lachman, p. 263, *et seqq.*) names at one time familiar to the Roman system, and expressing differences in municipal organization, in privileges or obligations relatively to Rome, but all agreeing in the one fact that they were Roman colonies. Afterwards, but much later, the term *colonia* was applied to the city itself, as expressing a municipal difference and prerogative, and *civitas* became the general name for all colonial cities which, however they might differ in some points, agreed in the circumstance of having a territory attached to them. "Civitates enim quarum conditiones aliæ sunt coloniæ dicuntur, municipia, quædam præfecturæ."—Sic. Flacc. p. 135. There is an interesting disputation in Aulus Gellius, xvi. 13, upon the differences between *coloniæ* and *municipia*. These differences, even in his day, were hard to catch, the historical rights and obligations upon which they had been founded having faded into oblivion. He says, "Sic adeo et municipia quid et quo jure sint, quantumque a colonia differant ignoramus." He adds that there was a general opinion that a so-called *colonia* (or municipium having *jus coloniæ*) was greater or more respectable than an ordinary municipium. "Existimamusque meliore conditione esse colonias quam municipia." The Emperors granted *jus coloniæ* to cities which had never been colonies.

[c] c. 1.

Roman world, conducted under the orders of Augustus.[a] Theodosius the younger, in the fifteenth year of his reign, ordered "provincias orbis terræ in longitudinem et latitudinem mensurari."[b] The technical name of a territory also was *pertica*, a word involving the meaning of measurement.[c]

Such being the object and general principle of Roman colonization, it was carried into practice by the following machinery.

A law was passed—by the senate and people in republican times—in after-times by the Emperor alone—authorising the plantation in question, and defining all that was necessary in relation thereto. Without such a law, called *lex colonica*, no colony could be despatched and established.[d] The details of such a law were manifold. Though no law of this nature is textually extant, it may be possible, if some little pains be taken, to collect and restore its leading provisions. Such a synthesis I have attempted, and now offer.

A *lex colonica* enacted that a colony should be sent out. It appointed the officers who should carry this proceeding into execution. In the time of the republic these were usually *triumviri*, who should act during a definite period judged sufficient for the purpose.[e] In later days a military officer seems to have been the functionary appointed by the Emperors.[f]

The law determined the number of the colonists; decreed the formation (*constitutio*) of a *civitas* or *cheflieu*; and settled the nature of its municipal government and its privileges in the face of Rome, whether it should be *municipium*, *prefectura*, or *conciliabulum*.[g]

Again, the law assigned to the colony its territory.[g] It defined that territory *en bloc*, giving its dimensions and its confines.[h] It fixed the breadth of the roads, ways, and lanes (*limites*) which should divide the allotted estates (*centuriæ*) from each other.[i] It directed that the land of which the *limites* were composed should be taken out of the soil of the estate assigned, or that they should be independently provided for out of the territory.[k]

[a] Liber Coloniarum, i. p. 242, and Latinus and Mysrontius, p. 348.

[b] See the *Itinerarium Antonini* cited in Godefroye's Note to the Theod. Code, ii. pp. 353-4.

[c] "Solum autem quodcunque coloniæ est adsignatum id universum pertica appellatur."—Frontinus, lib. ii. p. 26, and *agrimensores passim*.

[d] See Livy and the Libb. Colon. *passim*. "Hi agri leges accipiunt ab his, qui veteranos deducunt, et ita propriam observationem eorum lex data præstat."—Hyginus, p. 117.

[e] Liv. xxxiv. 53.

[f] Pp. 244, 253.

[g] LL. Mamilia, Roscia, &c. pp. 263—266.

[h] Hyg. p. 118.

[i] Hyg. pp. 111, 169, 175, 194. Also Lib. Colon. p. 212.

[k] "In agris centuriatis excipitur limitum latitudo causâ itineris."—Frontinus, ii. 58. "In quibusdam

It fixed the acreage of the *centuria* or normal estate of the colony, and the amount thus fixed prevailed throughout the territory.[a] When the rules of Roman colonisation became fixed it was usual not to allot out *centuriæ* at a less dimension than of 200 *jugera*. Occasionally the law provided that the *centuria* should be of 240 or 210 *jugera*.[b]

I should remark in this place that, the *lex colonica* making it absolutely imperative that the territory should be divided into square or rectangular *centuriæ* of the dimension enacted by it, there would be land left which could not undergo such a division as would yield these strict quantities. Under these circumstances, in order to obey the law in the letter at least, assignments of land were made in amounts of not less than 100 or 50 *jugera*. These were the only exceptions from the one fixed quantity of the full *centuria* which the law permitted to be made; but to distinguish them from the latter they were called, the one a *pro centuria*, the other a *pro dimidia centuria*.[c]

The *lex colonica* fixed the quantity of land (*modus*) to be granted to each colonist.[d] One colonist might take a *centuria* to himself. Three, four, or more might have one divided amongst themselves in what the law called *acceptæ*, *laciniæ*, or *præcisuræ*. Others might have a grant of several *centuriæ* without intervening *limites*. Such an union of *centuriæ* was either *latus fundus*—a continuation of two or three *centuriæ* only,[e] or it was *saltus*, an union of twenty-five *centuriæ*.[f] Such extraordinary grants were conditioned upon one or both of

regionibus cum limites late patere juberent, modus eorum limitum in adsignationem non venit. Sæpe enim et viarum publicarum per centurias modus exceptus."—Hyginus, p. 120. "Limitum quoque modus in quibusdam regionibus per amplum spatium exceptus est, in quibusdam vero modo adsignationis cessit."—Sic. Flaccus, p. 158. When the roads and lanes were made out of the *centuriæ* which abutted upon them they were not public property, however much the public might use them. This is conveyed by the words "iter populo non debetur" used by the *agrimensores* in these cases.—See Libb. Colon. Lachman, *passim*.

[a] Lib. Coloniar. *passim*.

[b] Hyginus, pp. 170, 210. Frontinus, p. 30. M. J. Nipsus, p. 293, and Libb. Coloniar. *passim*.

[c] Hyg. p. 110. Lib. Colon. i. p. 213.

[d] Front. ii. pp. 46, 47.

[e] Hyginus, pp. 46, 47. "Aliquando integras plenasque centurias binas, pluresve continuas, uni nomini redditas invenimus; ex quo intelligitur redditum suum, lati fundi. Hi per continuationem servantur centuriis."—Sic. Flacc. p. 157. This is the only passage in antiquity which gives the exact and technical meaning of *lati fundi* or *latifundia*.

[f] Lib. Colon. i. p. 211. Ibid. ii. p. 262. Sic. Flacc. p. 158. Porphyrion, the annotator of Horace, ii. 569, Hauthal's edition, explains *saltus* thus, "latis fundis porrectis per plurimos montes." See also an interesting passage in Frontinus, p. 53, which gives us a large notion of the Roman proprietor: "præcipue in Africa ubi saltus non minores habent privati quam respublicæ (*i.e.* cities) territoria;

two things, the high rank of the allottee,[a] and the inferior value or excessive amplitude of the land to be allotted.[b]

The law determined whether the whole territory should be *juris Italici* or *possessio* merely.[c] It also determined whether portions of it should be *juris Italici* while the rest should be *possessio*.[d]

The law regulated and disposed of *subseciva*—waste or surplus territory.[e] It reserved a proportion of the territory for allotment to subsequent colonists.[f] It granted the colonists certain portions of the territory to be used by them jointly and severally as common of pasturage.[g]

It gave jurisdiction to the municipal authorities over the persons of the colonists.[h] It defined the liability of these colonists to perform and execute municipal duties and obligations.[i]

The law entered also into the details of matter subsidiary to these greater

quin immo multis saltus longe majores sunt territoriis. Habent autem in saltibus privati non exiguum populum plebeium (*i.e.* coloni) et vicos circa villam in modum munitionum."

[a] "Non enim omnibus æqualiter datus, sed et secundum gradum militiæ et modus est datus," &c.—Sic. Flacc. p. 156. "Nam cum signis et aquila et primis ordinibus ac tribunis deducebantur, modus agri pro portione officii dabatur."—Hyginus, p. 176.

[b] Hyg. pp. 170, 171. Lib. Colon. ii. p. 262.

[c] These two kinds of property in land may be thus defined:—The one was in law an estate of absolute property, held by the proprietor of no person, freely alienable, devisable, and hereditary as a right; also it could not be charged with the *tributum* or direct land tax. The other *(possessio)* was an estate held of the Government, and neither alienable nor hereditary in the strict sense of right, but in the theory of law resumable at will by the State. It was subject to the *tributum*. As its defects of tenure were only devised to secure the realization of this important impost, the estate was in practice as firm, alienable, and hereditary as the other. The state only interfered with its course of enjoyment when the tax was in arrear. Then, and then only, it resumed possession. See p. 24 *et seqq.* of *A neglected Fact in English History*.

[d] The *leges colonicæ* distinguished the absolute estates as "*loca hæreditaria*," (see Cicero pro Cecina, c. 35), while *possessio* was said by them to be "*jure ordinario*," (see *post* in this note). For instances, where the whole territory is allotted as "*terra hæreditaria*," see Lib. Colon. pp. 258, 259. For instances, where both forms of property were constituted, see *ibid.* p. 226 *à propos* of the ager Spoletinus, "nam et multa loca hæreditaria accepit ejus populus .... ager qui a fundo suo tertio vel quarto vicino situs est in jugeribus jure ordinario possidetur: sicut est Interamnæ Flaminiæ et Interamnæ Palentino-Piceni," see also Lib. Colon. p. 259.

[e] Hyg. p. 133.

[f] Sic. Flacc. p. 157, "Excepta, quæ aut sibi reservavit auctor divisionis et assignationis," &c.

[g] Libb. Coloniar. *passim*. Sic. Flacc. p. 157 *et post*.

[h] Hyg. p. 118. Lib. Colon. ii. p. 164.

[i] Front. ii. pp. 52, 53.

directions. It determined the subdivision of the territory into the lesser *pagi*.[a] It enacted that *termini*, *i.e.* terminal signs, should be placed upon the confines of the territory and its *pagi*.[b] It determined the nature and form of these *termini*. It enacted that other *termini* should be placed upon the lines of the various *limites*, as definitions of the private estates of the colonists, in a manner and to an extent which will be the subject of our subsequent consideration. It directed that all these stones should be appropriately and significantly inscribed, and it prescribed the nature and particulars of the inscriptions.[c] It enacted the irremovability of these terminal signs, and prohibited encroachments upon the *limites*.[d]

The *lex colonica* lastly contained the names and designations of the colonists to whom the assignations were to be made.[e]

The assignment of a *territorium*, with appropriate privileges and obligations, in the manner just specified, was, however, not confined to *civitates* alone: to the *castella* upon the sea-shores and all the frontiers of the Empire were allotted like territories, the estates into which they were parcelled to be exclusively held by military tenants, who rendered watch and ward in their towers.[f]

Such were the principal contents of a *lex colonica*. It constituted not only a direction to the triumvirs or other commissioners, but was also an authority to be appealed to whenever in after days questions arose upon those internal arrangements of the territory to which its provisions referred. "Ergo omnium coloniarum municipiorumque leges semper respiciendæ erunt, itemque exquirendum nunquid post legem datam aliquid, ut supra dixi, commentariis aut epistulis aut edictis

[a] I have no direct authority for this; but it is inferible. The *lex colonica* was regarded as a final settlement of all that concerned the *territorium* and its internal affairs.

[b] See *post*. [c] Lib. Colon. i. p. 212. "Scriptos ita ut jusserit." See also *post*.

[d] LL. Mamilia, &c., p. 263, *et seqq*.

[e] Libb. Coloniar. *passim*.

[f] Cod. 11, 60, c. 2. "Quicumque castellorum loca quocunque titulo possident, cedant ac deserant, quia his tantum fas est possidere castellorum territoria, quibus adscripta sunt, et de quibus judicavit antiquitas." See the same law in the Theodosian Code, 7, 15, c. 2. There is also an interesting passage in reference to these castles in the *Anonymus Scriptor subditus Notitiæ Imperii*. (Gothofredus's edition of the Theodosian Code, vol. ii. p. 393), viz. "Est inter commoda reipublicæ utilis limitum cura ambientium ubique latus Imperii, quorum tutela assidua, castella melius prospicient, ita ut millenis interjectis passibus, stabilissimis et firmissimis turribus erigantur, quas quidem munitiones possessorum distributa sollicitudo sine publico sumptu constituat, vigiliis in his et agrariis exercendis." See also *ibid*. 7, 14, c. 1, de Burgariis. Frontinus also (ii. p. 35, Lachman) speaks of the territory of a *castellum*.

adjectum est, aut ablatum," says Hyginus.[a] It was the organic law of the country.

Such a law having been passed, the commissioners, with a requisite staff, proceeded to the scene of action. This staff consisted of a military corps, augurs, *agrimensores*, and architects, with their respective assistants.[b] In the first place, the demarcation of the territory, in accordance with the measure appointed to it by the *lex*, was effected by the *agrimensor*.

The demarcation was put in evidence by outward and external marks and signs, natural and artificial. In speaking of the border of the territory thus marked out, Frontinus says:[c] "Finitima autem linea aut mensuralis est aut aliqua observatione aut terminorum ordine servatur." More specifically Hyginus observes that it was bounded after the following fashion[d]:—"Per terminos territoriales et limitum cursus et titulos, id est inscriptis lapidibus, plerumque fluminibus, necnon aris lapideis claudi territorium, atque dividi ab alterius territorio civitatis." Siculus Flaccus, after saying that territories are bounded by rivers, mountains, and water-courses, adds,[e] "alia etiam lapidibus positis præsignibus, qui a privatorum terminorum forma differunt: alia etiam inter binas colonias limitibus perpetuis diriguntur." We thus have evidence that the artificial boundaries of a city's territory consisted of roads, stone altars, and *termini*, of a peculiar character, and larger than those of private estates—of the latter some being inscribed so as to show their purpose and meaning. The lesser divisions of the territory, called *pagi*, were also marked by signs and *termini* which answered their peculiar object. "Significanter finiuntur," says Siculus Flaccus of them.[f]

The territory having been thus appropriated to the colony, the next step was to *divide* and *assign* it (to use the technical words of the law) in *centuriæ*, or private estates, to and amongst the colonists.[g] This *centuriation*, as it was called, was the legal and constitutional act which perfected the change from public land into private property. Centuriation gave also to the eye and to the mind that Roman stamp by which provincial land ceased to be *rudis*, or unfashioned, and received a civil and political form.[h]

[a] P. 118.

[b] Cicero de lege agraria, Oratio 2da. cc. 12, 13.

[c] i. p. 22.

[d] P. 114.

[e] P. 163.

[f] Pp. 164, 165.

[g] It is to be regretted that the *agrimensores* have said nothing about what was done with the area of the city itself, and how it was allotted amongst the *municipalité* and the colonists. Vitruvius (lib. i. c. 5, 6, 7,) tells us what the architect did.

[h] Hyg. p. 203.

The division, or centuriation, was thus conducted:—The *agrimensor* divided the territory by a line drawn from east to west into two parts, which were called right and left, the right being on the north side of the *agrimensor* as he looked west, and the south being to his left. By another and intersecting line from south to north the *agrimensor* further divided the land into two more parts, that which faced the *agrimensor* being *ultra*, while that which was behind him was said to be *citra*, that line. All these divisions were by the *agrimensores* technically denominated *regiones*.[a] This method, as we see, gives us a division of the territory into four parts, right and left, *ultra* and *citra*, by the two great lines just described intersecting each other at an *umbilicus*, or central point, in the city about to be founded. The line drawn from east to west was the *decumanus maximus;* the other, drawn from south to north, was the *cardo maximus*.

Strictly, as I have stated, the *decumanus maximus* and *cardo maximus* began in and from the colonial city itself; and when the city and its territory were new creations in a barbarous country, this was practicable enough.[b] When the territory granted to the new colony was created out of that of an old Greek or Pelasgic city, such as

"Impositum saxis late candentibus Anxur,"

or when the future city was to be placed upon the sea-shore, the *agrimensores* made the best approximation that could be come to under the circumstances. Of these makeshifts the *agrimensores* give us examples in the drawings appended to their treatises. Of the normal plan Hyginus remarks, "Hæc est constituendorum limitum ratio pulcherrima. Nam colonia omnes quatuor perticæ regiones continet, et est colentibus vicina undique, incolis quoque iter ad forum ex omni parte æquale."[d] The same author gives a practical direction to the same effect in laying out the territory of a colony[e]:—"Si locus, in quo colonia constituitur, cultus erit, ex ipsa civitate maximum decimanum et kardinem incipiemus; ita si colonia ex solo constituetur." Thus the *decumanus maximus* and *cardo maximus*

[a] Hyg. p. 166. Frontinus, ii. pp. 27, 28, and *passim* in the agrimensorial books.

[b] Hyg. pp. 178—180, and see diagrams.

[c] Hyg. p. 194.

[d] Hyg. p. 180. This agrimensor gives Admedera in Africa as an example. I do not find this modern city in the classical geographies. It is, however, the same as that which is called *Ammedera* by Antoninus. It is now Haïdra in French Africa. See "*Mémoire Historique et Archéologique sur Tebessa (Theveste) et ses environs*," by Capt. Moll, in the "*Annuaire de la Société Archéologique de la province de Constantine*, 1858, 1859."

[e] Ibid. p. 191.

passed through the four great gates of the newly consecrated city, looking to the four points of the compass, and continuing with the same bearings to the verge of the territory.[a]

I have spoken of the *decumanus maximus* and the *cardo maximus* as lines only, but in reality they took the practical form of public roads.[b] These four leading lines of road, or *limites maximi*, being formed or staked out, the *agrimensor* next proceeded to cut up the four regions which they inclosed into square or rectangular estates, of equal and fixed dimensions, by means of a repetition of lesser *limites*, or roads, parallel to the *limites maximi*, and called simply, without a qualifying adjunct, *decumani* and *cardines*. The *limes* immediately parallel to the *decumanus maximus* was called *primus*,[c] and in like manner the *limes* immediately parallel to the *cardo maximus* was also called *primus*. The other *limites* in succession on all sides were similarly distinguished by their appropriate numeration, until the *finitima linea*, or march of the territory, was reached or approached. These *limites* (with the exception of every fifth recurring *limes*, which was distinguished as *quintarius* or as *actuarius*,) were called in the provinces *linearii*, in Italy *subruncivi*.

The specific breadth of all these *limites* we shall see hereafter; but, as a general and unvarying rule, all *limites linearii* and *actuarii* were narrower than the *maximi*.[d] The breadth assigned to the *limites maximi* and to the other *limites* varied in each colony according to the dimensions set upon them by the original authority of the *lex colonica*.[e] By the regulations of Augustus ("secundum legem et constitutionem divi Augusti"), the breadth of the *decumanus maximus* was forty feet, and that of the *cardo maximus* twenty feet; while the breadth of the *limites actuarii*, whether decumanal or cardinal, was twelve feet, and those of the *limites linearii* eight feet.[f] A *lex agraria* of Claudius for Tuscany made the same regulations.[g] But Siculus Flaccus makes the *decumanus maximus* and *cardo maximus* of equal breadth, varying from thirty to fifteen and twelve feet. He also makes the *subruncivi*, or *linearii*, eight feet broad, and says nothing of the breadth of the *quintarii*.[h]

[a] Ibid. p. 180.

[b] See the agrimensorial books *passim*. Frontinus, i. p. 24, says "Omnes enim limites secundum legem colonicam itineri publico servire debent."

[c] This sort of reckoning was purely Roman. It runs throughout the Digest in the numbering of the *capita*.

[d] Sic. Flacc. pp. 111 and 158. Hyg. pp. 120, 166, 167, 175, 191. Front. i. p. 29.

[e] *Ante*.

[f] Hyg. p. 194. [g] Lib. Colon. i. p. 212. [h] Pp. 111, 158.

By the *limites maximi* the colonists communicated with their own *cheflieu*, and with the cities of the adjoining territories. The lesser *limites*, opening into the larger roads, completed the communication. The former were always strictly public, while the latter were sometimes such, and sometimes not, being in the former case highways between township and township, in the latter only thoroughfares to the landholders and their tenants.[a]

It is however easy to suppose that, for the purposes of that sensitive communication which Rome maintained with each extremity of her Empire and with every point in its territorial compass, the colonial *limites maximi* were not wholly sufficient. That this was so, the existence of other great lines of road, the *viæ militares* in all the provinces abundantly attests. I may here remark, that upon the subject of Roman roads there has been some considerable confusion and misapprehension. Writers have failed to see the difference or the distinction which in a Roman point of view existed between *limites maximi* and *viæ militares*. The two descriptions of roads were however absolutely distinct. The *agrimensores*, who speak of both, distinguish the one from the other. The military ways also were sometimes made before the formation of the colonial lines, though more generally they were made afterwards.[b]

The statements made by the Roman lawyers in reference to these roads of the Empire have managed to perplex the subject in the minds of those who are not acquainted with the clear statements of the less accessible *agrimensores*, speaking upon a subject of their own art. This obscurity thrown by the jurists has arisen, however, solely from their using one set of terms, and the *agrimensores* another. There is accordingly no real difficulty in the matter. The lawyers, using popular and general phraseology in speaking of public ways, mention only ways military and vicinal. Ulpian defines and distinguishes the two ways thus[c]:—"Viæ vicinales quæ ex agris privatorum collatis factæ sunt, quarum memoria non extat, publicarum viarum numero sunt. Sed inter eas et cæteras vias militares hoc interest, quod viæ militares exitum ad mare, aut in urbes, aut ad flumina publica, aut ad aliam viam militarem habent; harum autem vicinalium viarum dissimilis conditio est, nam pars earum in militares vias exitum

[a] Sic. Flacc. p. 153. See Libb. Colon. *passim.*

[b] See Hyginus, p. 169. "Velut hi qui sunt per viam publicam militarem acti." See also the same author (p. 179), where an example is given of a *decumanus maximus* of a colony being taken along the *Via Appia*. The words used in the Lib. Coloniar. p. 241, "per certa loca viæ militares finem faciunt," show the same thing.

[c] Dig. 43, tit. 7, c. 3.

habent, pars sine ullo exitu intermoriuntur." This passage from the great jurist proves that the *viæ vicinales* and the lesser colonial *limites* are the same.[a] It also shows that the *limites maximi* and the *viæ militares* are all confounded under the one latter term. Why this happened is obvious. The lawyers, like the public, did not affect the pedantic and old-fashioned phraseology of the *agrimensores* when they spoke of roads, any more than they did when they spoke of estates, which latter they never called *centuriæ* but always *fundi*, a word in common daily use by the public. There was also another reason for it; the *limites maximi* answered the same purposes as the *viæ militares*, were framed upon the same plan, had the same breadth, and were kept up by the same means. The latter being more numerous, their appellation, therefore, absorbed and superseded the other. This is a sufficiently probable explanation of a fact which of itself cannot be denied.

The *limites* or roads which I have described divided every one *centuria* or normal colonist's estate from the others. These *centuriæ* were, as we have seen, estates of 200, 210, or 240 *jugera*, according as the *lex colonica* directed or provided.[b] If they consisted of 200 *jugera* they were generally quadrate in form. Under the other dimensions they took the form of rectangles, broader than long, or longer than broad, receiving in these cases the appellation *scamnate* or *strigate*.[c]

As soon as the *decumanus maximus* and *cardo maximus* had been made, the *agrimensor* set out *centuriæ* on both sides of these lines, viz. to the right and left of the *decumanus maximus*, and on the further and the nearer sides of the *cardo maximus*. These first rows of *centuriæ* were thus bounded by the *limites maximi* on two of their rectangular sides, while their two other (or succeeding) decumanal and cardinal *limites* were drawn, as I have said, parallel with the *limites maximi*. As with the roads so it was with the estates, and the *centuriæ* were continued until the marches were reached.

Under such a scheme all the *centuriæ* started from the *decumanus maximus*

[a] Ulpian, Dig. 43, tit. 8, c. 2, s. 22, has another definition of vicinal ways, "Vicinales sunt viæ, quæ in vicis sunt, aut quæ in vias ducunt."

[b] The *centuria* of 200 *jugera* was the more normal and usual quantity. See the Libb. Colon. and the agrimensorial books *passim*. The later text writers also preserved a tradition of its being so. Isidore, p. 369, Lachman, defines the *centuria* as "ducenta jugera;" and so says another writer at p. 372. Festus (sub voce *Centuria*,) gives the same definition.

[c] Front. i. p. 3. Hyg. p. 110 *et alibi passim*.

and *cardo maximus*, the practical direction of the *agrimensor* (whom I have followed), for setting out these *centuriæ*, being "applicemus nunc singulas centurias decumano sive kardini."[a]

By these limitary ways each *centuria* stood isolated and self-contained.[b] Even more, for unless these ways should be wilfully and fraudulently effaced in after time the *centuria* would remain, and was intended to remain, eternally the same.[c] This, strange as it may appear to us, was the aim and intention of the Roman law. It was with the *centuria* as one and indivisible, however in fact it were internally divided in the course of time, that the law dealt; upon the one undivided *centuriæ* the state levied its taxation and imposed its various other obligations.

The solicitude of the civil law was therefore to preserve the *centuriæ* within their original and normal bounds, not permitting them to be made greater or less in acreage and dimensions. To assist and facilitate this object of the state the law, as embodied and enforced in each *lex colonica*, provided that the *centuriæ* should all severally bear witness, in a language of permanent and inviolable signs, to their relative position and bearing, to their definition and demonstration, and to the lengths of their square and rectangular sides. These eloquent signs in obedience to that inspiration of variety which pervaded all Roman modes and institutes were as discrepant from each other in their detail as they agreed in their object.

Of these signs the most interesting as well as the simplest division consisted of what I will call centurial stones. There were other kinds of signs as certain though less obviously intelligible. The latter we will consider in their due order, taking the centurial stones first. These were inscribed and uninscribed.

The inscribed centurial stones may be divided into the following categories: 1. Stones showing the *numerus limitum*.[d] These may again be subdivided into such as contain also the regional description of the *centuria* and such as omit it.

[a] P. 196, Lachman.

[b] "Quatuor limitibus clausum."—Front. ii. p. 30.

[c] This may be illustrated by a passage in the Digest 33, tit. 7, c. 27, § 5, a *fundus* (*i. e.* a *centuria*, see *ante*), had been devised "cum suis salictis et silvis." But as these willow grounds and woods, though adjacent and contiguous, were not within the *fundus*, they did not pass, "id tantum cedere legato quod verbis comprehendisset." It is elsewhere said in the Digest (50, tit. 16, c. 60, § 2), "sed fundus quidem suos habet fines; locus vero latere potest quatenus determinetur et definiatur."

[d] These are the technical phrases of the *agrimensores*, pp. 172, 196, 217, 222, Lachman.

2. Stones showing the *numerus pedaturæ*. Both these categories show also the *nomen possessoris* or name of the grantee.

The uninscribed stones embrace—1, those which marked the *rectura* or lines of the estates; 2, those which showed by their conformation that they were meant to demonstrate that the point at which they were placed was a *trifinium* or *quadrifinium*, *i.e.* the point where three or four square or rectangular *centuriæ* all as it were met together.

I have said that the first category of stones received as its inscription the *numerus limitum*, the numbers of the decumanal and cardinal lines of road by which the estate was bounded. What *limites* were considered to bound the estate in this sense, and upon what principle they were numbered, will require a detail to render the explanation intelligible.

We have seen that a territory was divided mensorially into four compartments (as it were) technically called regions. Two of these regions lay to the right and left of the *decumanus maximus*, the other two being beyond or on this side of the *cardo maximus*. All the lesser *limites* were marked out within these regions. According as the lesser decumanal *limites* approached or receded from the right or the left side of the *decumanus maximus*, so they took their number. According, also, as the lesser cardinal *limites* were in similar succession to each other beyond or on this side of the *cardo maximus*, so were they numbered in reference to that position. Into this numeration neither the *decumanus maximus* nor the *cardo maximus* were allowed to enter. This exclusion of the *limites maximi* from the numeration makes the numbering, which, as we shall see, was given to the lesser *limites*, intelligible; for, by their exclusion, each *centuria* was regarded as having for its own peculiar boundary-roads one *decumanus* and one *cardo* only; and it was of these two *limites* that the number and regional specification were inscribed on the stones of each estate.

This may be illustrated by the following example:—To the right of the *decumanus maximus* is a *centuria*, bounded by the first lesser decumanal *limes* in that region. This same *centuria*, which lies on the other side of the *cardo maximus*, is bounded by the first lesser cardinal *limes* in that region.[a] The fit inscription for the stones *inclosing* (as the *agrimensores* called it) an estate so situated is "D D I," "V K I."[b] The fit inscription for another *centuria*, just as near to the *decumanus maximus*, but on the left instead of the right,

[a] Hyginus, pp. 111, 112, 194, 195, 196. [b] Ibid.

and placed similarly as regards the *cardo maximus*, is "SDI," and "VKI." So the appropriate inscriptions for a *centuria* equally approached to the right or to the left of the *decumanus maximus*, but on this side of the *cardo maximus*, are "DDI KKI," "SDI KKI."[a] Inscriptions for the *termini* of estates more removed from the *limites maximi* will easily and readily suggest themselves. Sometimes the letters showing the regional position of the *centuria* were omitted in the inscription. Hyginus means this when, after reciting the full inscription, he says of it, "est optima; licet et quomodocunque inscriptum sit, perito mensori non latebit, quoniam certus est lapis quo centuria eluditur;"[b] and one of the inscriptions in the diagram illustrating his text exhibits only the decumanal and cardinal figures, without giving what I have called the regional letters.[c]

The stones of the second category were simpler in their nature. They were inscribed with the *pedatura*, or amount of feet of one side of the *centuria*, either in the integral number or in divisions of it. These numbers, through the unyielding necessities of space, were not expressed in ordinary Roman numerals, but by *notæ*—mysterious letters which did duty for them.[d] But however mysterious these *notæ* look, we are in no difficulty as to their interpretation; for we possess the key in two treatises which have come down to us.[e]

As I have before said, the figures expressing the *pedatura* would be either the whole amount of the feet of one complete side, the stones being single, or, the stones being more or less multiplied, the number would run on from one to another, according to the intervals of distance, until the full *pedatura* of the entire side was attained. In all cases the calculation was made—"Ut ab uno ad unum dirigantur," says one professor.[f] "Quantum compotum habuerit tantum quæris ab eo ad aliud signum," says more explicitly another master.[g] Of these stones, as of those of the first category, normally there were four; viz. one at each corner, "Omnibus in mediis tetrantibus lapides defigemus," says Hyginus.[h] Siculus Flaccus affirms the rule, but speaks of exceptions.[i] Under these exceptions they might be "a capite usque ad caput,"[k] or two stones only, one commanding the line of the

[a] Hyginus, pp. 195, 196. D and S, it is scarcely necessary to say, stand for Dextra and Sinistra; D and K, for Decumanus and Cardo, or an oblique case of those nouns; K and V, for Citra and Ultra respectively.

[b] Ibid. p. 173.

[c] Diagr. 145, A.

[d] Ibid. p. 309. See also pp. 358, 359.

[e] Ibid.

[f] Hyginus, p. 109.

[g] Latinus V. P. Togatus, p. 309. See also Lib. Colon. p. 213.

[h] P. 194; also at p. 195 he says "His angulis lapides defigamus."

[i] P. 142.

[k] Ibid.

decumanus, the other that of the *cardo*.[a] These would be quite sufficient to show the surface measurement of the estate.[b] Very often these stones were more numerous.[c] "Sæpe enim plures et in uno rigore" (*i. e.* a straight line), says Hyginus.[d] We have seen that the *lex colonica* of a territory established the dimensions of the *centuria* at 200, 210, or 240 jugera.[e] There would not be the same space between the terminal stones of a *centuria* of 200 feet and a *centuria* of more, *i. e.* when those stones represented the full length of the sides containing the right angle. "For instance," says an *agrimensor*, "if a *centuria* has 240 *jugera*, there must be along the lines of the *decumanus* and *cardo* respectively, from stone to stone, 24 *actus* (or halves of a *juger*) and 20 *actus*, for so many *actus* given for *decumanus* and *cardo*, multiplied into each other (*inter se*), make 480 *actus*. In some *perticæ* (territories) where the *centuriæ* have 200 *jugera*, 20 *actus* are not always given equally along the lines of the *limites* upon the stones. In the Beneventine territory there are 25 *actus* along the lines of the *decumani*, and 16 along the lines of the *cardines*. In that measure 200 *jugera* are indeed included, but quadrate centuries are not expressed."[f]

There was a third category of these stones, which omitted both the *numerus limitum* and the *numerus pedaturæ*, retaining solely the *nomen possessoris*.[g]

There was also another stone partaking of the character somewhat of this latter, but which, by the nature of the inscription, could only be placed upon the estate in times succeeding the original colonization. I mean the stone which bears upon it, not the *nomen possessoris*, but the *nomen fundi*.[h] This was the legal appellation of the estate, the name which the tax-gatherer and the recruiting officer put into their books, the conveyancer into his deeds and wills, and the registering clerk into the register of sale and transfer.[i] It was a derivative from the *nomen possessoris*, or the name of the original grantee. This *nomen fundi* is interesting,

[a] That this is the meaning of *caput* see Marcus Junius Nipsus, p. 286, *apud* Lachman,—"Cum in agro assignato veneris et lapides duo contra aliis alios in capitibus centuriæ in decumano sive in cardine inveneris," &c.

[b] Sic. Flaccus, p. 159. "Tot enim actus numerum per decumanum ac per cardinem datos inter se multiplicatos," &c.

[c] Sic. Flaccus, p. 142, "in mediis spatiis plures interpositos."

[d] P. 127, Lachman.

[e] *Ante*, and Sic. Flacc. p. 159.

[f] Sic. Flaccus, p. 159.

[g] Of this we shall see examples *post*.

[h] This is meant by the words "ager ejus in nominibus villarum et possessorum," &c.—Lib. Colon. p. 239. *Villa* is here used for *fundus*, as the latter is legally employed for the collective *villa* and estate. "Ager cum ædificio fundus dicitur." Dig. 50, 16, c. 211.

[i] Dig. 50, tit. 15, c. 4 and *passim*.

for it was meant by law to be as eternal as the *fundus* or *centuria* itself. We shall see in the course of this paper how well this object was attained.

The mode of inscribing all these stones was either on the tops or on the sides.[a] The lateral plan, however, was used universally to express *pedatura*,[b] and was also considered by the *professores* to be the best method for all purposes. "Latera autem lapidum recte inscribuntur, quoniam ampliores numeros capiunt. Nam verticibus inscribi non facile omnia possunt."[c] Sometimes centurial stones were uninscribed: "Multi tantum decumani maximi et cardinis lapides inscripserunt, reliquos sine inscriptione ad parem posuerunt; quos ideo quod nulla significatione apparent quoto loco numerentur mutos appellant," says Hyginus.[d] These last-mentioned sorts of stones being of the same formation, and laid down in the same manner, as the inscribed stones, served the same purpose so long as they remained inviolate.[e]

There was also a further and abbreviated method adopted by the *agrimensores* upon some occasions. Instead of separate stones to each *centuriæ* placed in the modes which I have mentioned, the *agrimensores* put one or more stones uninscribed, but shaped specifically[f] for this purpose, in the angle or point where three or four *centuriæ* met and coalesced (as it were) together.[g] Where this angle or point was will easily suggest itself to the reader in a diagram of three or four square or rectangular *centuriæ*. This point was technically called in the one case *trifinium*, in the other *quadrifinium*.[h]

Where good stone failed, the *termini* might be *pali lignei*, *congeries lapidum acervatim congestæ* (called also *scorpiones*), stone walls (called *attinæ*), tops of *amphoræ* stuck into the ground, natural stones "aliudve quod loco termini observari videbitur, ex consuetudine regionis et ex vicinis exempla sumenda sunt."[i]

[a] Hyg. pp. 171, 194.

[b] Hyg. p. 172.

[c] Hyg. 173; see also Hyginus, p. 194.

[d] P. 172.

[e] "Ad rationem vel recturas limitum pertinent."—Lib. Colon. pp. 213.

[f] For the shape of the trifinial stones, see pp. 305, 306, 307, 361, of Lachman's Collection, and the diagrams.

[g] "Nam in supradictis locis, ubi limitem opere manuum hominum ordinavimus, terminos non necesse habuimus ponere, nisi in certâ ratione in trifinio aut in quadrifinio."—Ex libris Magonis et Vegoiæ auctorum, p. 349. Lachman.

[h] In the Theodosiani et Valentiniani Constitutiones, p. 273, Lachman, a *trifinium* is defined to be "convenientia trium centuriarum." "Trifinium dictum eo quod trium possessionum fines attingit. Hinc et quadrifinium quod quatuor," p. 367, Lachman. "In trifinium, id est, in eum locum quem tres possessores adstringebant."—Sic. Flaccus, p. 141.

[i] Sic. Flaccus, pp. 142, 143.

All these signs were above ground; but the *agrimensores* were not content to leave the evidences of their craft upon the surface only. They established a system of under-ground signs also, to supply the place of those which should be removed from the surface, or which, from a scarcity of material, might not have been put there.[a] Some of these underground monuments were walled substructures made to support mounds or hillocks of earth, the latter being artificially heaped over them. We have a specimen of these figured in the diagrams, and thus described in the text—"substructio ad terras excipiendas."[b] Of the same nature was the *arca*, a substruction of four walls, also figured in the diagrams. Upon this I hope, at a subsequent period, to have the honour of laying before the society a statement more in detail. The mound of earth itself answered a purpose in the *agrimensura*, and under the name of *botontinus* was a true *terminus*. "In limitibus vero ubi rariores terminos constituimus monticellos plantavimus de terra, quos botontinos appellavimus," say Faustus and Valerius.[c]

It is obvious, however, that these *botontini* would have failed to answer an agrimensorial purpose if there had not been something else to identify them with that purpose in a manner which should be significant to an *agrimensor* if to no one else. Accordingly means were adopted to make them clearly significant. On the ground which should form the base upon which these mounds and hillocks would be subsequently heaped, the *agrimensores* deposited charcoal, broken pottery, gravel, pebbles brought from a distance, lime, ashes, pitched stakes[d] —all things which upon a subsequent excavation of the mound would demonstrate that the hand of man had placed them there to serve with their surroundings as a token of something more abstruse. Such was the centuriation of a territory.

[a] "Quidam et signa defodiunt pro terminis."—Hyg. p. 127. "Nam et variis regionibus signa defodiunt pro terminis."—Sic. Flacc. p. 139, and see also p. 349. See also *post*, the passage quoted from St. Augustine.

[b] P. 341, Lachman.

[c] P. 308, Lachman; and see diagram of a *botontinus*, No. 290. "Etiam monticelli sunt in finibus constituti."—P. 306, Lachman. The author goes on to say that ignorant persons took sepulchral barrows, which of course resembled these *monticelli*, for them.

[d] "Et intra ipsis (the *botontini*) carbones et cinus et testa tusa cooperuimus. Trifinium quam maxime quando constituimus cum signis, id est cinus aut carbones et calce ibidem construximus, et super duximus et super toxam monticillum constituimus."—Faustus et Valerius VVPP. Auctores, p. 308, Lachman. The "Expositio terminorum per diversas provincias positorum" says (p. 361), "collectaculum de carbonibus in calce miscitatos et glerias fluminales ne dispicias: signales constituimus." The same author continues "palos picatos pro terminis invenies." These *pali picati* are shown by Mago and Vegoia (p. 349), to have been deposited underground. "Idem partes Tusciæ Florentiæ quam maxime palos iliceos picatos pro terminibus sub terra defiximus."

When all this had been done the law took upon itself the preservation of the land-marks, exhibiting the most sensitive jealousy upon the subject of any change or variation of them. The transfer or removal of a centurial stone, the intentional obscuration of a boundary tree by planting a copse round it, a change of woodland into ploughland,—in short, anything done by an owner "to convert the face of places," met with its distinctive punishment.[a]

Upon division and limitation followed assignment—the grant and conveyance of the land to the colonists. Sometimes one *centuria* went to one man. Sometimes it was given to several, the rank and file of the colonists; such subdivisions being technically called *acceptæ, laciniæ, præcisuræ*.[b] When this subdivision took place further demarcations were made to distinguish one *accepta* or subdivision from another.[c] These demarcations were usually wooden palings, quick fences, and ditches.[d]

All the land that was divided was not, however, always assigned. Sometimes where the territory was large it was kept in reserve, in order to be granted to future colonists. This reserved land remained in the State.[e] Of Emerita in Lusitania the dimensions of the *pertica* or territory were so immense that much of the river Anas flowed through it. The veterans who colonised it were disposed at the extreme ends of it. Very few were settled near the colonial city and the river. The rest of the territory was left unassigned, to be afterwards filled up. There were two further assignments afterwards made; but, as the author to whom we owe this information says, "nec tamen agrorum modus divisione vinci potuit, sed superfluit inadsignatus."[f]

The *decumani* and *cardines* being as I have said carried to the edge of the territory, and that being natural and irregular in its boundary, there would be left a space between this boundary line and the last centuries. This was "ager

[a] "Ne quis voluntario finem proferat," says Siculus Flaccus, p. 154, Lachman. Caligula imposed, for each stone that had been moved, a fine of 50 aurei upon those "qui terminos statutos extra suum gradum finesve moverint dolo malo."—Dig. 47, tit. 21, c 3. A law of Hadrian banished the proprietor, and fined and whipped others "qui terminos finium causâ positos protulerunt."—Ibid. c. 2, *de termino moto*. Callistratus, in Dig. 47, tit. 21, c. 3, § 2, says "Hi quoque qui finalium quæstionum, obscurandarum causâ faciem locorum convertunt, utputa ex arbore arbustum, aut ex silva novale, aut aliquod ejusmodi faciunt, pœna plectendi sunt."

[b] See *ante*. See also Hyginus, p. 113.

[c] Frontinus, ii. p. 40.

[d] Hyginus, p. 172. Lib. Coloniarum *passim*.

[e] T. Liv. 35, c. 9. Hyginus, p. 201. Sic. Flaccus, p. 163. "Non omnis ager centuriatus in assignationem cecidit, sed et multa vacua relicta sunt."

[f] Frontinus, ii. pp. 51, 52.

[g] Ibid.

extra clusus."[a] When this was not assigned in grants "pro centuria" or "pro dimidia centuria," it was waste of the state; as such, it was marked off by limitary stones of a peculiar form.[b]

But there was other land which was not divided, but was kept as waste to be enjoyed in common by the neighbouring proprietors. This beneficial provision of law originated thus: The land which was allotted to colonists was *ager cultus*, cleared and good land. The barren and unpromising portions, the woodland and the marsh, though of course included in the territory, were so far as possible not assigned to the colonists. Much of this land would of course be valuable as an adjunct, though insufficient and unsupporting as a single estate; it was therefore granted to the proprietors whose estates adjoined and surrounded it as common of pasture.[c] When the division and assignment were perfect the *agrimensores* completed their task by framing a map which should be a counterpart and reflection of the new territory. This map contained the measurement of the territory and of the estates reduced to a scale. It showed the roads and lanes bounding those estates, and the *subseciva*. It gave the names of the allottees. It was in duplicate. One part was kept in the *cheflieu* newly founded, the other "in sanctuario Cæsaris" as one imperialist *agrimensor* says, and (as another phrases it) "in tabulario Cæsaris," *i.e.* in the same muniment house.[d]

[a] "Subsecivorum genera sunt duo: unum quod in extremis adsignatorum agrorum finibus centuria expleri non potuit."—Front. i. pp. 6—8. "Unum est, quod a subsecante linea mensura quadratum excedet."—Sic. Flaccus, p. 155. "Extra clusa loca sunt æque juris subsecivorum quæ ultra limites et infra finitimam lineam erunt."—Front. i. pp. 22, 55, 56.

[b] See *post*.

[c] "Aliud genus subsecivorum, quod in mediis adsignationibus et integris centuriis intervenit."—Front. i. p. 7. "Alterum est autem quod subsecantis assignationes lineæ, etiam in mediis centuriis relinquetur. Evenit hoc autem ideo, quoniam militi veteranoque cultura assignatur. Siquidem enim amari et incerti soli est, id assignatione non datur."—Sic. Flacc. pp. 155, 156. "Loca autem relicta sunt, quæ sive locorum iniquitate sive arbitrio conditoris limites non acceperunt."—Front. i. pp. 21, 22. "Relicta sunt et multa loca quæ veteranis data non sunt. In Etruria communalia, quibusdam provinciis pro indiviso. Hæc fera pascua certis personis data sunt depascenda tunc cum agri adsignati sunt."—Front. ii. p. 48. "Est et pascuorum proprietas pertinens ad fundos, sed in commune; propter quod ea compascua multis locis in Italia communia appellantur."—Front. i. p. 15. "Compascua, quod est genus quasi subsecivorum, sive loca quæ proximè quique vicini, id est qui ea contingunt . . . . pascua."—Sic. Flacc. p. 157. There is a *hiatus* in this passage, but the meaning is plain. "Cum plus terræ quam datum erat superesset proximis possessoribus datum est in commune nomine compascuorum . . . hæc amplius quam acceptas acceperunt, sed ut in commune haberent. In multis locis quæ in adsignatione sunt concessa ex his compascua fundi acceperunt."—Hyginus, p. 202.

[d] Sic. Flaccus, pp. 154, 155. Front. ii. p. 16. Hygin. pp. 202, 203. Lib. Colon. p. 223 and *passim*. Gaius and Theodosius, p. 346.

Such was the system which the agrimensorial writers have given us upon paper. As it is one so removed from our daily experiences and so peculiarly conventional in some of its principles and much of its form, it will be more satisfactory before proceeding to other and more material proofs of it as a real and existing fact to see how far it receives its corroboration in the ordinary unprofessional literature of Rome.

Apart from internal evidence, that perfect agreement upon all professional points which is eminently found in the agrimensorial writers from the æra of Trajan to that of Theodoric, there is distinct corroboration of them in other authors, as well upon the principles of law laid down as also upon the *arcana* of the art disclosed and detailed by them. The phraseology of the *agrimensor* is repeated by the poets and by that prince of *prosateurs* Cæsar.

Plautus is the first. No one can be found more liberal in the use of agrimensorial terms, or more exact in their application, than the great comic poet; and none can doubt that the Roman *plebs*, ever agitating for territorial doles, would critically appreciate the due employment of these appetising words. In the prologue to the Pænulus,[a] Plautus goes wholesale into agrarian nomenclature:—

> "Ejus (that is the argument of the play) nunc regiones, limites, confinia
> Determinabo, ei rei ego finitor (*i.e.* agrimensor) factus sum."

In the same play he also employs *limes* in the agrimensorial sense of road:[b]—

> "Viam qui nescit qua deveniat ad mare
> Eum oportet omnem amnem quærere comitem sibi.
> Ego male loquendi vobis nescivi viam:
> Nunc vos mihi amnes estis: vos certum est sequi.
> Si benedicetis, vostra ripa sequar,
> Si maledicetis, vostro gradiar limite."

Catullus[c] has the following allusion:—

> "Is clausum lato patefecit limite campum."

Ovid[d] says—

> "Communemque prius ceu lumina solis et auras
> Cautus humum longo signavit limite mensor."

Statius[e] exclaims—

> "Qui limite præceps
> Non licito per inane ruis?"

[a] Vv. 48, 49.
[b] Act iii. s. 3, v. 14, *et seqq.*
[c] Poem 68, v. 67.
[d] Metam. lib. i. vv. 135, 136.
[e] Thebaïd. lib. 8, vv. 84, 85.

Cæsar, a geometrician and a writer on *Auguralia*, when making a speech to his officers, could find no better trope to suit his purpose than two of the technical terms of the *agrimensores:*—"Sed quoniam ipsi sibi neque modum neque terminum constituunt, quo cæteri dissimiliter se gerant."[a]

St. Augustine, writing A.D. 426, familiarly refers to that most obscure division of the system—the *botontini*. The great western father, in pursuing a chain of analogies, calls to his aid that practice of the *agrimensores*, so strange to us, but perfectly plain and intelligible to his readers and his auditors,—the charred coals buried for a purpose in artificial mounds and barrows:[b]—"Quid in carbonibus? Nonne miranda est et tanta infirmitas, ut ictu levissimo frangantur, pressu facillimo conterantur, et tanta firmitas, ut nullo humore corrumpantur, nulla ætate vincantur, usque adeo ut eos substernere soleant, qui limites figunt, ad convincendum litigatorem, quisquis post quanta libet tempora extiterit, fixumque lapidem limitem non esse contenderit? Quis eos in terra humida infossos, ubi ligna putrescerent, tandiu durare incorruptibiliter posse, nisi rerum ille corruptor ignis effecit?"

Various terms of the *agrimensores* are defined by Festus just as the former would explain them themselves.[c]

The peculiar terms *pagus* and *pertica*, in the strict sense of the *agrimensura*, are used in the existing *Tabula Alimentaria Bæbianorum*, a document of the time of Trajan.[d]

The ancient *nomina fundorum* remained in Italy, until the middle ages, attached to the same estates to which they had been originally attributed.[e] The edict of Domitian, granting the *subseciva* of Italy to the adjoining landholders, so often recited by the *agrimensores* in their treatises, is still extant, preserved in the

[a] *Hist. de Bello Africano*, c. 54.

[b] *De Civit. Dei.* lib. xxi. c. 4. I am indebted to Gough for this reference. He does not, however, quote the words of the original passage.

[c] "Limites:—in agris nunc termini, nunc viæ transversæ." "Decumanus:—appellatur limes, qui fit ab ortu solis ad occasum. Alter ex transverso currens appellatur cardo."

[d] See *Annali dell' Instituto di Corrispondenza Archeologica*, vol. i. N.S., vol. xvi. pp. 93, *et seqq.*

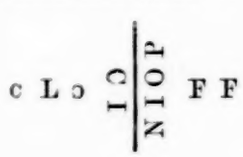
[e] See *Annali* iv. 241, a paper by M. Petit Radel, entitled "Villes de la Sabine." "Il ne faut s'étonner qu'une expression aussi latine ait persisté dans le bas age aux environs de Ricti, lorsque parmi les anciens noms des biens fonciers on lisait encore dans les mêmes diplomes *fundum Quintilianum*, *Pompeianum*, *Tullianum*, *Domitianum*, *Sallustianum*; lorsque enfin plus d'un millier d'années après Varron un fonds de terre etait encore connu dans la Sabine sous le nom de *Terentianum*, qui était son nom de famille, et que le champ que Caton y avait cultivé de ses propres mains etait encore appelé *Catonianum* au temps de l'Abbé Hugues, l'an 976."

Palazzo Communale at Falerone, in the old Picenum.[a] Long after the time of Justinian the state never used any other language towards the colonies when it spoke of taxes, imposts, and obligations arising out of land than the shibboleth of the *agrimensor*, who had shaped that land into its legal Roman form, and had given it that strange denomination we have seen, viz. *centuria*.[b]

The knowledge of the land law of Rome exhibited by the *agrimensores* is exact and complete. They accurately define the two estates in land known to the Roman law,—the one the estate peculiar to the provinces, called *possessio*, the other the absolute estate confined only to Rome and the *solum Italicum*, except where a rare legislative favour had extended it beyond those limits. Their definitions of these estates agree in every point with those of Gaius, the greatest jurist of the Antoninian period. Without him they would have been uncorroborated, the Digest and Code being silent, for the plain reason that Justinian had abolished the distinction between the two sorts of property before the publication of either of his compilations.

Having found that the *agrimensura* receives its corroboration at the hands of Roman writers of all shapes, we will next inquire how far it agrees or coincides with those material evidences extant upon the continent which may be considered to have reference to it.

As the system, though general through the empire, originated in Italy, I will in the first instance have recourse to that country for such illustration as it still affords, before I call attention to the more numerous varied and conclusive proofs, entirely neglected though they be, which we possess at home. In Italy have been published two centurial stones found in the territory of the old Œclanum.[c] Of these, one has been thus read:[d]—



[a] Annali, &c., xi. 38.

[b] Cod. Theod. II. tit. i. c. 10, "Omnes qui per Africam opulentas desertasve *centurias* possident, &c. (A.D. 365, Valentinian and Valens). See also ibid. tit. 28, c. 13, A.D. 422. Justinian refers to the land-tax as being exigible in respect "*ὑπὲρ ἑκάστου ἰούγου, ἢ οὐιλίων* (*villæ*) *ἢ κεντουρίων ἢ ἄλλων οἵων δήποτε ὀνόματι*," &c. Nov. 128, c. 1.

[c] See a paper by the celebrated historian Dr. Theodor Mommsen, entitled "*Sulla Topografia degli Irpini*," in the "*Bulletino dell' Instituto di Corrispondenza Archeologica, per l'anno* 1847." Roma, p. 165.

[d] Ibid. p. 167.

This inscription is *in vertice* ("nella parte superiore del primo termine"). The other inscription, evidently copied with greater exactitude, is thus given:[a]—



Dr. Mommsen observes of both of them, "Sono evidentemente le *lapidariæ inscriptiones in verticibus* dell Igino, p. 155 seq. e conterranno l'indicazione del cardine e decumano, ed in oltre forse quelle *litteræ singulares* di cui parla lo stesso, p. 211."[b] Notwithstanding this assertion, however, it is easy to see that neither of the inscriptions contains the *numerus limitum*. They in fact belong to the other division altogether.[c] The first inscription should be interpreted as follows:—In the "c L ɔ" the "c" and "ɔ" are not ciphers, for in that case the reading would be *fifty thousand*. Such a cipher, if applied to *jugera*, is simply impossible; and the *pedatura* is (as we shall see) otherwise actually recorded in the inscription. These marks are therefore not signs, but *paraphes* merely, exaggerated probably by the Italian copyist Santoli, from whose work Dr. Mommsen has transcribed the inscription. The "L" which remains is not a numeral, but the initial and equivalent of the entire word *limes*, which latter occurs in full in two African inscriptions, as we shall shortly see. The "C I" are *sigla* for the *pedatura*—1,450 feet. The NIOP, which are manifestly corrupt, stand for the name of the *possessor*, and FF are his patronymic "F . . . . filius."

No false reading stands in the way of the interpretation of the second stone. The VE express the *pedatura*—2,200; the other letters the *nomen* and patronymic of the allottee. The *nomen* is the name well known to the student of civil law as invariably contrasted with the inseparable Seius, both being the Jack Noakes and Tom Styles of the Roman jurisconsults. It is the more interesting, therefore,

[a] Ibid. [b] Ibid.

[c] An opinion expressed by Dr. Mommsen should not be met by a contradiction only. That the stones in question are not decumanal and cardinal will appear by a reference to what I have before stated concerning such inscriptions. It will be seen that Dr. Mommsen's inscriptions are not what he asserts them to be, because they do not contain the two separate numbers which designate the decumanal and cardinal *limites* upon which the estate was situated, and such numbers (called technically *numerus limitum*) were not and could never be expressed by *sigla*, the latter being always of too large a range for such a numeration.—See Lachman, pp. 309 and 358.

to meet with it as a real appellation in the flesh, as it were. It occurs also upon a *colonnetta*, supposed to have come from Tarquinii"—L. TITIVS. C. F.[a] In support of my contention that the unintelligible letters "NIOP" can only have reference to the name of the proprietor, I will observe that the division in each inscription is obviously meant to operate as a division also of the entire subject of it. As, therefore, in the second inscription, which is perfectly clear, we find the nomen and patronymic of the allottee separated for distinction's sake from the compartment which shews the graduated *pedatura*, so in the first stone we may conclude that the same distinction was meant by the same division. In that case, although we may not understand it in the way in which it has been read, we have a right to conclude that "NIOP" is only a bad reading for what should be a real and intelligible name.[b]

Two centurial inscriptions have been found in North Africa, modest and simple in form certainly, being both *Limis Fundi Sallustiani* only, but of a rare interest if they can be identified (as a French author thinks) with the estates of the magnificent ruler of Numidia, the incomparable historian Sallust.[c] These varied

[a] Dr. Mommsen's Paper, p. 177.

[b] Dr. Mommsen, in the paper before referred to, speaks of them as being the only examples remaining in Italy. "In questo tratto di paese si sono scoperti i limiti Graccani, i soli che fra tanti e tanti che già esistevano per tutta l'Italia, ci siano rimasti belli e ben conservati." I cannot, however, persuade myself that this is so in Italy. For *termini* which have neither the *numerus limitum* nor the *numerus pedaturæ*, and are without the centurial *sigla*, have been noticed by Italian Archæologists, who have considered them, though I think entirely without reason, to be sepulchral. A paper entitled "*Scavi di Palestrina*," by Dr. Henzen in the "*Monumenti ed annali publicati dall' Instituto di Corrispondenza Archeologica, per l'anno* 1855," fascicolo i. Roma, p. 77, gives twelve inscriptions containing names and patronymics only, "P.GAVILI.L.F," &c. &c. These are engraved upon "colonnette di peperino," and M. Henzen adds "Altre stele poi sono di forma quadrilatera, superiormente foggiate sia a guisa di tetto aguzzo, un lato del quale viene occupato dallo scritto, sia portanti quest' ultimo semplicemente inciso sullo stretto piano superiore." These stones were in the garden of Sig. Campana's "Villa Celimontana" at Rome. Dr. Henzen believes that they were brought thither from Tarquinii. If so that fact will account for the omission of the *numerus pedaturæ*, for in that colony says the Liber Coloniarum, p. 219, Lachman, "Alii juxta loci naturam spissiores sunt siti, id est, sine mensure seu numero." And again (ibid. p. 239) "ager ejus limitibus Gracchanis in nominibus assignatus." Some other inscriptions of precisely the same character, upon quadrilateral and round stones, are given at pp. 86 and 87 of Dr. Henzen's paper, *e.g.* "LICINII SUCCESSI," &c. The Padre Garrucci, speaking of *stelæ* found about Præneste (a Roman colony, see Lib. Coloniar. ii. 236, Lachman) says "queste colonette sono oggidi chiamate *segnali* dai cavatori e dai contadini," ibid. p. 77. It is at least curious that this word *segnali* is a term of the agrimensores,—"signales constituimus," p. 361, Lachman. These *stelæ* or *colonnette* are of the shape of the Gracchan and Augustinian *termini*, pp. 242, 401, Lachman.

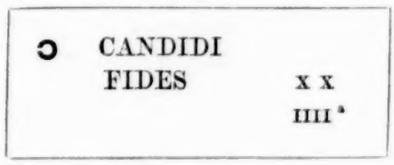
[c] These two inscriptions exist at Thysdrus, at the distance of one hundred paces from each other. (See

evidences must be taken distinctly to prove the truth of the general system described in the books of the *agrimensores*.

It now remains to see whether the same system can be shewn to have once existed in Roman Britain.

This task I readily accept, for England and Wales are, as I shall proceed to show, exceptionally rich in proofs of centuriation and limitation. I will take centuriation first, as distinguished from limitation in the strict and literal acceptation of that term. In England and Wales are to be found extant or rescued from oblivion by description and record examples of every mode by which centuriation signified itself. There are in this country stones which show the *numerus limitum*, others which shew the *numerus pedaturæ*, others again which, deficient in these particulars, have evinced by their presence and position the external lines merely of the estate,—all, however, identifying themselves and the land by bearing the *nomen possessoris*.

Besides these monuments, which once spoke out plainly, we have examples of those others which, though less obviously intelligible, were significant enough to the initiated. I mean the trifinial and quadrifinial stones, the *botontini* with their selected contents, and the subsecival stone. Of my first division the stones which shew the *numerus limitum* are the most important of all, because they bear directly upon the great question of Roman road-making (*limitatio*), and of them the following examples have been found in this country. At Mancastle in the county of Lancaster was a Centurial Stone with the following inscription:—



This is an inscription of extraordinary interest. FIDES is indubitably a bad

a paper of M. Jules Marchant in the *Recueil de la Société Archéologique de la province de Constantine*, vol. x. p. 74.) They show the *nomen fundi*, which, though not so usual as the *nomen possessoris*, was occasionally employed,—"ager ejus in nominibus villarum," p. 239, Lachman. The use of *villa*, in the sense of *fundus*, has already been noticed.

[a] Gough's Camden, iii. 375. It is superfluous to remind the reader that the mark at the commencement of this inscription (and which will be found in others that follow) is the well known *siglum* for the word *centuria*. (My authority for the form *siglum* is Justinian, Cod. i. tit. 17, c. 2, § 22.) The sigle in both its forms (see *post*) is the Etruscan C, vide the Etruscan Alphabets, in pl. xl. vol. iii. of *L'Etrurie et les Etrusques* of Des Vergers.

reading. This is however of less consequence, as it in no way disguises the character of the stone or interferes with its attribution. It is a stone showing the *numerus limitum*. The XX express the number of the decumanal *limes*, as the IIII is the number of the cardinal *limes* upon which severally the *centuria* of Candidus was situate. The inscription is either in part effaced, or it omitted to state whether the decumanal *limes* was in the right or left region of the territory as divided by the *decumanus maximus*, and whether the cardinal *limes* was on the further or the nearer side of the *cardo maximus* (*i. e. ultra* or *citra*).[a] But for such omissions by *agrimensores* one of their writers has prepared us.[b] This stone is the more valuable, that if its original *situs* can be fixed it would furnish *data* for ascertaining and determining the *civitas* of the territory whose *limites* it expresses.

A stone (found in Monmouthshire) of the same character but less perfect in the inscription was preserved at Mathern in the same county. The inscription was copied by Camden, who read it thus:[c]

VIII
> VALER
MAXSIMI.

But by Gough's time the numerals VIII, which stood for the *cardo*, as being last in order, had disappeared.[d] The numerals expressing the number of the *decumanus*, which must have preceded the others, were effaced when Camden first saw this stone.[e]

Of my second division, the stones which show the *numerus pedaturæ*, the examples published by Dr. Bruce, and commented upon by me on a former occasion,[f] are most valuable and interesting, and they deserve, with another found at Trawsfynydd in Merionethshire, which I shall presently mention, to take their place by the side of the two Italian specimens described by Dr. Mommsen. Why the stones figured in Dr. Bruce's work and others (to be hereafter mentioned) should be found by the great wall is easily explained. They

[a] *Ante.*
[b] *Ante.*
[c] Gough's Camden, iii. 109, 117.
[d] Ibid.
[e] Ibid.
[f] Proc. Soc. of Antiq. 2 S. iv., pp. 21 *et seqq.*

designate *centuriæ* belonging to *milites castellarii*—estates situated in the territory of a *castellum* on a frontier of the empire.[a] It should be here observed that the stations and castles of our great wall to which these stones refer existed before the construction of the wall itself.[b] Their names without other evidence, which however is not wanting, prove this. The other stone alluded to by me was found "in a mount in a Roman camp near Trawsfynydd in Merionethshire, called Tommen-y-mur (or the Mount of the Wall), and through which the Roman road Sarn Helen passes."[c] The inscription upon this stone (which is engraved in Plate X. fig. 2,[d]) is thus conceived:—

> AN D
> PXXXIX

We have in this a *centuria* of Andreas or Andronicus, and a cipher of 1239 feet, for as the P in this case is not separated from the other numerals it must be read as a *siglum*.

The stones which illustrate my third division are comparatively plentiful. Gough's Camden supplies many of these, which being found in Northumberland and Cumberland will, like Dr. Bruce's specimens, belong to the territories of the various stations. Though Gough's invaluable work is readily accessible I do not hesitate to transfer these inscriptions to the present pages, because the reader will then have all the evidences in one context before him. The inscriptions which these stones bear are as follows:—

> CL. PRISCI [e]

> MV
> NATI
> MAX [f]

[a] *Ante.*

[b] Researches instituted by John Clayton, Esq., F.S.A., have, I believe, illustrated this fact.

[c] Archæologia, xiv. 276, and see the engraving of the stone, *ibid.* pl. x. fig. 2.

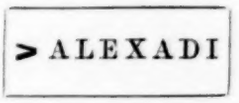
[d] Ibid. p. 57. I am indebted for this interesting reference to Albert Way, Esq., F.S.A., whose penetration nothing can escape.

[e] Gough's Camden, iii. 459, 2nd edition.

[f] Ibid. p. 460.



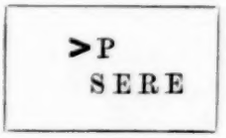
[a]



[e]



[b]



(*sic.*) [f]



sic.) [c]



(*sic.*) [g]



[d]



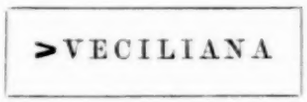
(*sic*). [h]

The Archæologia gives us the following inscription on a stone of the same category found at Castlesteads, at the western extremity of the great wall:—



[i]

Wales furnishes us with the following inscription on a stone found in Monmouthshire, it is not said where:—



(*sic*). [k]

[a] Gough's Camden, iii. 509. [b] Ibid. [c] Ibid. [d] Ibid. p. 503.
[e] Ibid. p. 505. [f] Ibid.
[g] Ibid. [h] Ibid.
[i] Archæologia, ix. 67. [k] Gough's Camden, iii. 109, 117.

Lastly, at Castle Cary, on the Antonine wall, has been found a stone which marks the *centuria* of a limitanean soldier, and is thus inscribed[a]:—

CHO VI
Ↄ ANTO
ARATI

Of the fourth division also there is yet something still extant: the trifinial stone has not died out entirely. There are or were two stones upon a green balk in Castor Field (Caistor in Northamptonshire), descending to Gun Wade Ferry. They are nicked at the top like arrows.[b] These two stones are the same in shape, and therefore in intention, as the "terminus bifurcus," which marked a *trifinium*, or angle where three *centuriæ* met (see *ante*).[c]

A stone which marked *subseciva* is still extant at Thames Head in Gloucestershire. It is uninscribed. It is shaped like a horse-block,[d] and answers to diagram No. 307 of the *agrimensores*.[e] It should therefore be "terminus qui subsecivum demonstrat."[f]

[a] Proceedings Soc. Antiq. Scot. 68. For this important reference, which extends centuriation to the western verge of the empire, I have to thank C. S. Perceval, Esq., Dir. S.A.

[b] Gough's Caistor, p. 109.

[c] Vide the diagram 237, and p. 305, Lachman.

[d] I am indebted for this information to George R. Wright, Esq., F.S.A., whose obliging courtesy also furnished me with a sketch of the stone itself. Mr. Wright read, at the last meeting of the British Archæological Association, a very valuable and interesting paper upon the subject of "Thames Head," in whose vicinity the stone is extant. It is noticeable that it is placed on the borders of the counties of Wilts and Gloucester.

[e] Vide plates in Lachman.

[f] p. 342, Lachman. I have cited all the centurial stones in this country of which I have been able to obtain a knowledge. They are not many, as it will have been seen. But this scarcity is an argument neither against their genuineness nor the exactness of the ascription for which I have contended. One class of them agrees with the two inscribed stones (described above) which have been found in Italy, and all, without exception of any, coincide with the definitions given by the *agrimensores*. We shall see also that in times much later than the Roman rule they were still *in situ*, and understood in England and Wales. Their destruction, whensoever it occurred, must have been intentional, and as it did not ensue upon the disruption of the empire, it may fairly be assumed to have been gradually effected from time to time as occasion favoured dishonesty, and would therefore occur most whilst the object of these stones was known and understood. At all events the fact that they are rare in England and Wales can no more be taken as an argument against their being what they pretend to be, than their almost total disappearance in Italy can be held to disprove the evidence of the Libri Coloniarum that in that country they formerly existed in myriads.

Of Roman *botontini* in England there is such plain evidence, that the careful and observant Gough, even in his uncritical age, was struck with their agrimensorial meaning and value. He remarks, "The writers of boundaries say little hillocks of earth, called *botontines*, were placed on bounds, so that I am apt to think most of the *tumuli* and round hillocks we see scattered up and down the country were raised for this purpose, and that ashes, coals, potsherds, &c. would be found under them, if they were searched."[a] A grand example of the *botontinus* is Silbury Hill. Of this Gough says, "Major Drax, digging perpendicularly through this hill, in 1777, found only a rotten post and a rusty knife."[b] The post was an example of the *palus picatus*.[c] At Lilborne, in the county of Northampton, "there is (says Gough) a conical hill, near which some people digging, in hopes of treasure, found only coals (*i.e.* charcoals, the *carbones* of the *agrimensores*)."[d] When Cuckhamsley barrow in Berkshire was opened, there was found in the centre "an immense oaken stake, bound with twigs of willow and hazel."[e] This stake presented evident traces of the action of fire.[f] This is another *palus picatus*.[g] Bellas Knap, in the county of Gloucester, is a very interesting specimen of these *tumuli*. It has been minutely and carefully described by W. L. Lawrence, Esq., F.S.A., in the Society's Proceedings.[h] The rough walls under the mound are the "substructio ad terras excipiendas" of the *agrimensores*.[i] The broken pottery, nearly all of the Roman or Romano-British period, and the deeply-strewn wood ashes found in the interior, are, as we have seen, normal contents of the *botontinus*.[k]

From centuriation I will pass on to limitation. Of the limitation of England and Wales there should be to our hand the amplest evidence and illustration; but imperfect observation in some cases, and defect of technical knowledge in others, have mystified a subject which may be said to lie under our eyes. I mean that antiquaries, whenever they have written upon this subject, have almost invariably omitted to mention the breadths of the Roman roads which have fallen under their notice. The gravity of this omission will be evident to all who shall have followed the course of my previous remarks. Simultaneously also with this omission to observe facts with the exactness requisite for their due comprehen-

[a] Gough's Camden, ii. 271.
[b] Ibid. i. 159.
[c] *Ante.*
[d] Ibid. ii. 271, and *ante.*
[e] *History and Antiquities of the Hundred of Compton, Berks*, by William Hewett, junior, p. 100.
[f] Ibid.
[g] *Ante.*
[h] Proc. Soc. Antiq. 2 S. iii. 278, 279.
[i] *Ante.*
[k] Ibid.

sion, our antiquaries have never directed their attention to the books either of the *agrimensores* or the jurists—the only writers who could give aim and significance to facts exactly noticed and ascertained.[a]

Under such circumstances, it cannot be a matter of surprise that a subject simple and intelligible enough if its study were duly prosecuted, has never been presented in a clear, satisfactory, or reasonable form. If it had been otherwise, the notion so long upheld, and still prevailing, that the Romans made four or five prolonged highways only in and through this land, could never have attracted even the inclination of a belief.

These remarks are meant only to show that to apply the true Roman *limitatio* and its rules which we have seen to England and Wales is at least a novelty. Fortunately, though it be novel, there is no real difficulty in the subject. One or two clear and intelligible instances of this limitation (as the absence of general measurement will not allow more) will be sufficient for illustration. The county of Lancaster is "intersected from end to end by four great roads of the Romans; two run from east to west, and two from north to south."[b] So Surrey, Hertfordshire, Bedfordshire, Berkshire, and other English counties are similarly decussated by the Roman roads of the greater magnitude. In all these cases such roads are the *decumanus* and *cardo maximi* of Roman *territoria*, and the towns of Roman foundation at the point of intersection of these roads are the *civitates* to which those *territoria* belonged. So Silchester affords a reasonable presumption that it was the *civitas* of a territory which may have been the present Hampshire.[c] The Reverend J. G. Joyce, F.S.A., has shown[d] that from the forum of Silchester, disinterred by himself, there start four roads, N. S. E. and W. This is what should normally be in a colonial *civitas*,[e] for these roads are the inchoate *limites maximi* which were to be afterwards extended through the territory of the colony. That they were so extended there is still the clearest evidence remaining upon the face of the country.[f] Near Caistor, in Northamptonshire, there is a Roman road called the Forty-foot Way,[g] the ordinary breadth of the *decumanus maximus*.

[a] I except Gough; see the passage above quoted; but he is the only instance.

[b] Whitaker's *History of Manchester*, i. 110, 2nd edition. Baines's *Lancashire*, vol. i. p. 13.

[c] It is no objection to Silchester being what I have suggested it was that it is on the borders of the *territorium* of another *civitas*. This occasionally happened; see diagram No. 151, Lachman, which represents a city placed upon the *finitima linea*.

[d] Proc. Soc. Antiq. 2 S. iii. 496.

[e] *Ante*.

[f] See Cruttwell's *Tours through Great Britain*, ii. 199.

[g] Gough's Camden, ii. 269 and 292, 2nd edition.

These are scanty examples it is true, but they illustrate a rule which I will state thus: wherever two Roman roads of the normal breadth of the *decumanus* and *cardo maximi* can be satisfactorily traced as converging to and diverging from a point in a county (not necessarily a true centre) which is or was a town of proved antiquity, that town is, like Lancaster and Silchester, a Roman *civitas*, and the adjoining shire through which these roads pass was its *territorium*.[a] Further, assuming that the *decumanus* and *cardo maximi* are identified in any one instance, all the other *limites quintarii* and *actuarii* will be easily and by necessity identified also, whether traces of them exist or have been effaced, for in respect of the latter the question becomes one only of proportionate and parallel distances.[b]

Besides these material monuments of Rome still or at one time extant and known to the learned though unascribed by them, there floated in Camden's time a curious tradition which not improbably made reference to the customary suspension of Roman laws in the *Tabularium*, a fact that must have been well known to the provincials of this country. Camden says the following rhyme prevailed at Ribchester, in the county of Lancaster:

> "It is written upon a wall in Rome,
> Ribchester was as rich as any town in Christendom."[c]

This distich may be a genuine tradition from Roman times, for Ribchester was a Roman colony, and the *lex* which decreed and constituted it would be affixed like other laws to walls in the repositories of the capitol.[d]

[a] The presence of a subsecival stone, on the verge of an English county, if it be in its original *situs*, should prove that the latter, on one side at least, is conterminous with a Roman *territorium*.

[b] The straight roads of narrow gauge, dividing one township from another in South Yorkshire, were pronounced by that very able antiquary, the Rev. Joseph Hunter, to be Roman, though want of acquaintance with the *agrimensura* did not allow of his correctly appropriating them.—*South Yorkshire*, i. 7, General History.

[c] Gough's Camden, iii. 378. Baines's *Lancashire*, iii. 379.

[d] *Ante*. This practice is well illustrated by the Roman poets also. In the *Trinummus*, Act iv. sc. 3, v. 30, *et seqq*. Stasimus says—

> "Mores leges perduxerunt jam in potestatem suam,
> Magis quis sunt obnoxiosæ, quam parentes liberis,
> Eæ miseræ etiam ad parietem sunt fixæ clavis ferreis,
> Ubi malos mores affigi nimio fuerat æquius."

The general system which I have described was recognised and understood as long as the Empire lasted;[a] and even centuries after the termination of that empire the stones and signs which we have discussed retained in England and Wales their former ascription, use, and meaning.[b] In Wales they were even to the time of Hoel Dda protected by the severest sanction of the law;[c] and to the same period in that country the *notæ* inscribed upon them continued to possess their old significance.[d]

In conclusion, I feel no hesitation in affirming that the monuments found in England and Wales to which I have called attention demonstrate with sufficient clearness the general centuriation of this country, and as centuriation by its presence here proves absolutely the colonisation of this country by Roman citizens and soldiers,[e] the existence is thus shown of a pervading Roman

Virgil (Æneid, lib. 6) alludes to the custom thus:—

"Fixit leges pretio atque refixit."

Ovid also (Metam. lib. 1):—

"Pœna metusque aberant, nec verba minacia fixo
Ære legebantur."

The *Tabulæ honestæ missionis* generally end in these words: "Descriptum et recognitum ex tabula æneâ, quæ fixa est Romæ."—See J. F. Massman's *Libellus Aureus*. Lipsiæ, p. 22.

[a] Valentinian (as quoted out of the Cod. Theod. in Lachman's collection, p. 269) says "Si veteribus signis limes inclusus finem congruum erudita arte præstiterit."

[b] The word *merestan* (boundary stone) occurs *passim* in Mr. Kemble's Cod. Diplom., *e.g.* (vol. vi. p. 231) "thanon on mereston: of than stone endlang mereweies to bican trowe." The language of this passage is not pure, but this probably has been the fault of a later copyist. The passage itself is the more interesting that it recognises the *limes* (mereweie) as well as the limitary stone. In the same manner these stones, under their original name, "maen tervyn," *i.e.* stone *terminus*, are spoken of *passim* in the Welsh laws, and the regulations respecting them are many. "Whoever shall remove a public meer-stone between two trefs (*i.e.* centuriæ) is to be fined," &c.—Venedotian Code, book ii. c. 25, Aneurin Owen's translation. By "Welsh laws" (ibid. p. 525) the removal of a "maen tervyn" is punishable as theft. The *limes* is referred to as "a road which may preserve a meer with the side of the road." (p. 96. See also Gwentian Code, c. 32, par. 5, p. 373, and Welsh Laws, c. 25, par. 4, p. 525). It is further said (Dimetian Code, book 2, c. 23, par. 40, p. 271) "Whoever shall deface a mark upon a meer (here is meant a meer stone) between two lands or two trevs," shall be fined, and must restore the mark to its former state. The word translated *mark* is "*not*" in the original. It is thus curious to find the words *terminus* and *notæ* incorporated into the vernacular of Wales, and existing therein long after the severance of the country from the Empire.

[c] Ibid.

[d] Ibid.

[e] "Ager ergo divisus adsignatus est coloniarum." (Frontinus, p. 2.) To form a judgment of what Roman colonization at all times was, we have only to consider what Trajan did for Dacia. Eutropius says, "Ex toto orbe Romano infinitas eo copias hominum transtulerat ad agros et urbes colendas." This coloniza-

proprietary in England and Wales, an element of population which may account for the greatness of the general character as it certainly does for much of the physical conformation of this nation.

Mem.—Since this paper was written two more centurial stones have come to my knowledge, one found in Brecknockshire (Archæological Journal, x. 177, 178), the other near a Roman road between Grainbeck and July Park, Whitby. (Young's History of Whitby, ii. 703.) They are both of my third division. The inscription upon the Yorkshire stone has been ill read.

tion of Dacia resulted in the foundation of forty or, as the Peutingerian table says, fifty cities, and the establishment therein, and in their territories, of Latin-speaking settlers. See a very interesting pamphlet, entitled "Coup d'œil sur l'histoire des Roumains, par A. Treb. Lauriani, Bucuresti, 1846." How rude and undigested in comparison was the way in which the tribe lands of an O'Brian or a Maguire were made shire ground!

IX.—*On Ancient British Barrows, especially those of Wiltshire and the adjoining Counties. (Part I. Long Barrows).* By JOHN THURNAM, *Esq. M.D., F.S.A., Local Secretary for Wiltshire.*

Read December 12th, 1867; February 20th and 27th, 1868.

THE results of explorations in the sepulchral tumuli of the pre-Roman or ancient British period of this country have never been exhibited in a distinct manner, or in a form useful for the purpose of comparison. Numerous investigations of these barrows, in nearly every part of England, some on a larger and some on a smaller scale, have at different times been made; but, if we except Sir John Lubbock's analysis of the results obtained by Mr. Bateman in Derbyshire and the adjoining counties, and of part of those obtained by Sir R. C. Hoare in Wiltshire,[a] no one has been at the pains of analysing the results arrived at, or of pointing out the inferences to which they lead. As is well known, "Wiltshire is the county where the monumental remains of the ancient occupants of Britain are at once the most numerous and characteristic;"[b] in no other district of the island are the barrows so numerous, and no examinations of them perhaps so important as those conducted by Sir R. C. Hoare and his coadjutor Mr. Cunnington; whether we consider the number excavated, the results obtained, or the character of the district, the seat of great Druidical fanes and places of resort, the ruins of which are found at Avebury and Stonehenge. In the magnificent but ponderous and costly folios of his "Ancient Wiltshire," Sir Richard Hoare printed the details of his researches; but in this work they are exhibited in a far from convenient or accessible form, and they have never been subjected to a full and complete numerical analysis.

Having during many years occasionally sought relaxation in what a former Secretary of this Society has designated, not inaptly, "a description of barrow-digging at once tedious, irksome, and laborious,"[c] I had long been desirous to

[a] Sir John Lubbock, *Prehistoric Times*, 1865, chap. iv. Tumuli, pp. 83-118. *Trans. Ethnol. Soc.* N.S. 1865, iii. 307; 1867, v. 114.

[b] Dr. R. G. Latham, in Dict. of G. and R. Geography, article "*Belgæ*," i. 387.

[c] J. Y. Akerman, "*On the Opening of Four Ancient British Barrows in South Wilts.*" Archæologia, xxxv. 480.

ascertain the results which might be deduced from the extensive researches of the Wiltshire Baronet; and about ten years since I extracted from the "Ancient Wiltshire," in a tabular form, all the descriptions of the tumuli the opening of which is recorded in that work. It is the results thus obtained, in connection with those yielded by my own researches, and with such other observations as serve to illustrate the subject, which are exhibited in, and form the basis of, the present papers.

Introduction.

External Forms. Observations of the older Writers.—It will in the first place be convenient to devote some attention to the outer forms of the barrows, which present no little variety. Considering the great number of these primitive sepulchral monuments in Wiltshire, it need not perhaps surprise us that all the earlier observations and classifications of barrows refer to this county. Leland, in his *Itinerary*, alludes to the "sepultures of men of warre .... in dyvers places of the playne," near Avebury, by which he evidently intends the barrows;[a] whilst he describes those near Stonehenge, with precision and even elegance, as "monticuli illi ex egesta terra conglobati."[b] Camden added little to Leland. Writing of Wiltshire he says, "Many such artificial hills both round and pointed are to be seen in these parts, and are called burrowes or barrowes, probably thrown up in memory of soldiers slain thereabouts. Bones are found in them." More attention was paid to the sepulchral tumuli of this county by that "indefatigable searcher-out of antiquities"[c] John Aubrey, the Wiltshire antiquary. In his *Monumenta Britannica*, which still remains as a whole unpublished, Aubrey has a separate chapter on barrows, and treats of them likewise in connection with Stonehenge. He seems to have been the first to question the common opinion, which was entertained by Leland, Inigo Jones,[d] and Camden, that all barrows "were made for burying the dead that were slayne hereabouts in battels;" and with reason presumes "they were the mausolea or burying-places for the great persons

[a] See also Leland's *Assert. Inclyt. Arturi*, eds. 1540, 1715, and *Collect.* 1770, v. 44; where he attributes the barrows to the Saxons who fell in battle.

[b] *Comment. de Script. Britann.* De Ambrosio Merlino Cambro. 1709, p. 44.

[c] Stukeley, who profited more by Aubrey's unpublished labours than he had the candour to avow, so designates Aubrey. *Itin. Cur.* ii. 169.

[d] Inigo Jones's *Stonehenge*, ed. 1725, p. 62. Another author of the 17th century, Sir Thomas Browne, also regards barrows as "the sepulchral monuments of eminent persons, especially such as died in the wars." Tract IX. On Artificial Hills, Mounts, or Barrows, 1658.

and rulers of those times," whom, he says, "they chose to let lye drye upon such hilly ground; and those of the same familie would desire to lye near one another."[a] Aubrey distinguishes the circular from oblong barrows, which last he makes the subject of a separate chapter, giving them, especially when surrounded by standing stones, the name of "sepulchres." Among round barrows he again distinguishes "some about Stonehenge," which, he says, "have circular trenches about them, and the trench is distant from the barrow," clearly the form afterwards known as bell-shaped. He likewise particularly notices those elegant barrows of slight elevation to which I have proposed to give the name of "disc-shaped."[b] These he describes as "circular trenches, with a shallow protuberance, or little tump or two of earth, in the centre . . . . The diameter is of good length . . . . The graffes (*i.e.* ditches) of these circles are inwards." In more than one place in his MS. work he inserts a diagram of these earthworks, to which, though he treats of them in his chapter on barrows, he does not give that name, but, with his friend Colonel James Long, regards them as "places for the combustion of the dead, and for performing the funeral ceremonies."[c] It is clearly these observations of Aubrey's put into a methodical form, probably by his friend Tanner, that form the basis of the classification of barrows which appeared in Bishop Gibson's edition of Camden's *Britannia*, published in 1695, whilst Aubrey was still living. This classification is as follows: "There are several sorts of barrows on these downs (of Wiltshire); 1. small circular trenches, with very little elevation in the middle; 2. ordinary barrows; 3. barrows with ditches round them; 4. large oblong barrows, some with trenches round them, others without; 5. oblong barrows with stones set up all round them."

This classification was adopted by Dr. Stukeley, who, however, applied to the different forms of tumuli designations having no better foundation than his own fancy.[d] Of all the writers on our national antiquities, there is perhaps none whom it is so difficult justly to estimate as Stukeley. In no other works of his time is there such a mixture of minute original observation with crude and ill-

[a] In other places in the *Monumenta Britannica*, Aubrey seems to adhere to the old opinion, that barrows are an indication of battles. This opinion was more decidedly contested by Stukeley.

[b] *Examination of Barrows on the Downs of North Wilts.* Wiltshire Arch. and Nat. History Magazine, vi. 1860, 332.

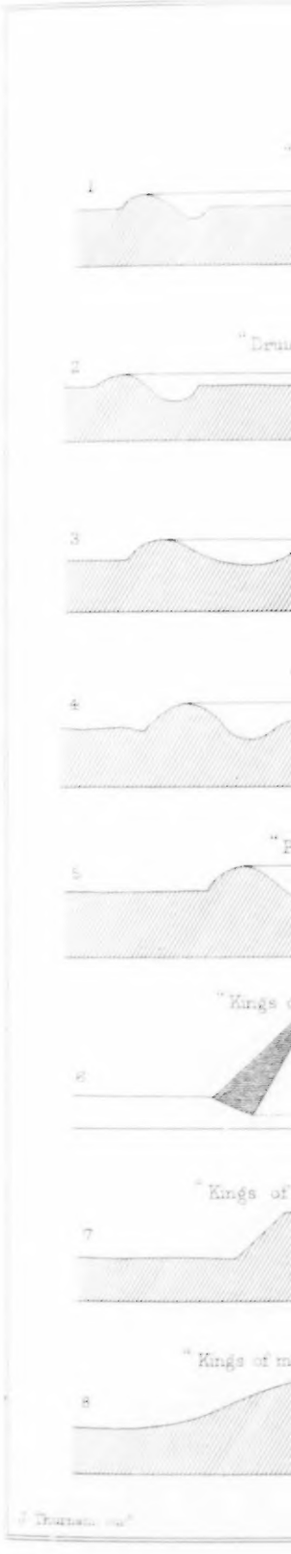
[c] "Within the circles," says Aubrey, "everybody was not permitted to enter; 'procul ô procul ite profani.'" . . . . The tump in the centre "was perhaps the remainder of the ashes of the wood, or perhaps it might be an elevation for the priest or general to make his harangue."

[d] Stukeley, *Stonehenge*, 1740, p. 43. *Abury*, 1743, p. 40.

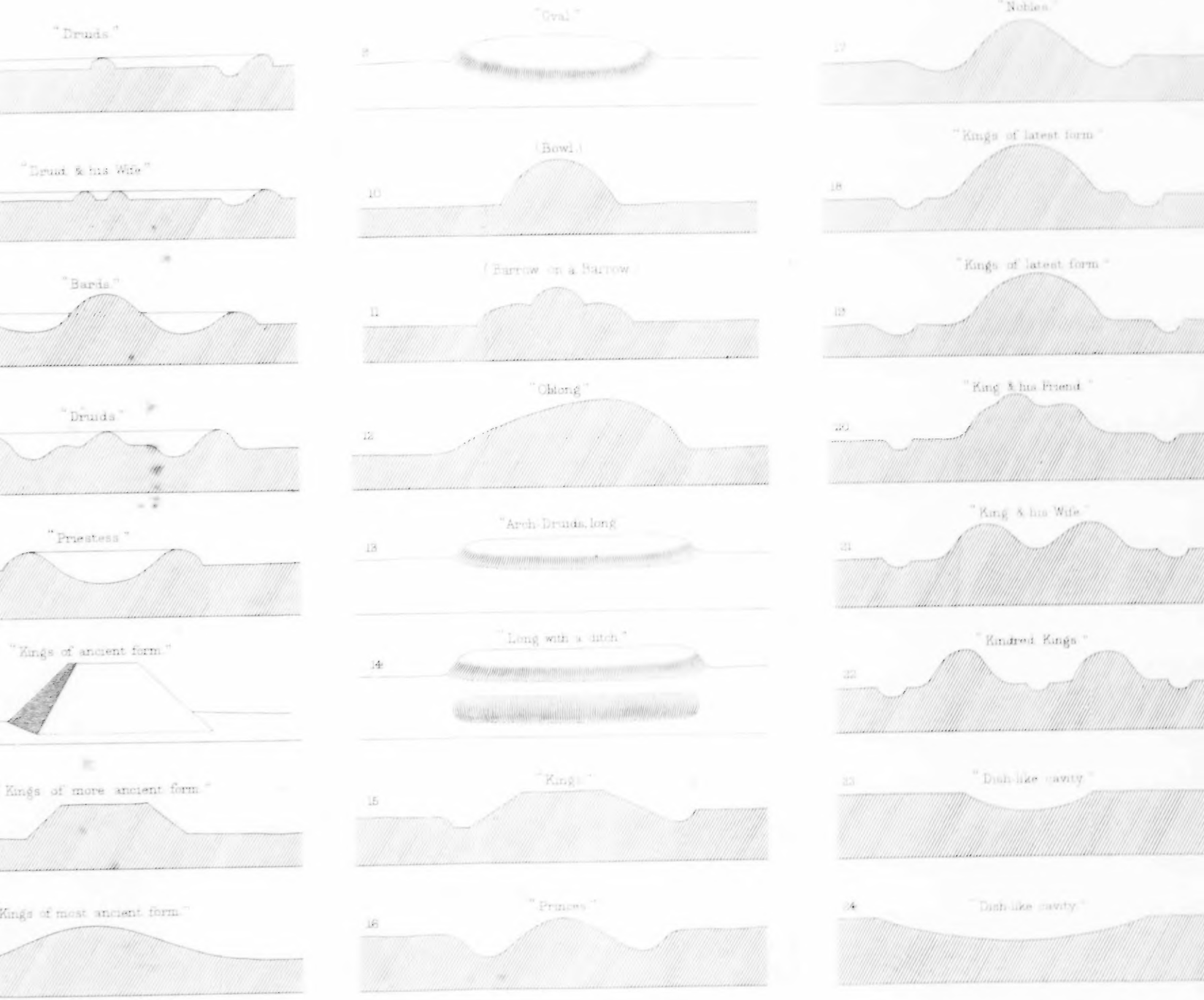
founded conjecture and hypothesis, and there are none probably which require to be used with so much caution. In his "Stonehenge" Dr. Stukeley draws attention to the "variety in the shape and turn" of the barrows in that neighbourhood, "and in their diameters and manner of composition. . . . They are assuredly," says he, "the single sepulchres of kings and great personages, buried during a considerable space of time, and that in peace. . . . . The variety in them seems to indicate some note of difference in the persons there interred. . . . . Probably the priests and laity were someway distinguished, as well as the different orders and stations in them." On no better grounds than these conjectures, and on the solitary fact, as he says, that a brass celt was found in the great long barrow furthest north from Stonehenge,[a] he terms the "ordinary barrow," and barrows with ditches round them, "King barrows;" the "circular trenches" of Aubrey, "Druid barrows;" and the oblong tumuli, "Arch-Druids' barrows." Stukeley's imagination, however, did not stop here. Some years since, in looking through the large and unarranged collection of the Stukeley drawings and MSS., formerly in the possession of Gough and now in the Bodleian Library, I met with two sheets of elaborate and carefully-drawn sketches, the one entitled "The forms of the Barrows at Stonehenge, in Section;" the other, "Celtic Sepulchral Monuments at Abury." On the former are sketches of twenty-four, and on the latter of fifteen, varieties of barrows, four of the latter surrounded by peristaliths of standing stones. The designations[b] attached to these sketches of barrows are remarkable for their wildly-fanciful character. They are "Druids," "Arch-Druids," "Druid and his wife," "Bards," "Priestess," "Kings of ancient, more ancient, and most ancient forms," "Kings of latest form," "King and his friend," "King and his wife," "Kindred kings," "Princes," and "Nobles"! From the ill effects of this terminology, quite enough of which was given to the world by Stukeley, the study of the primitive sepulchral antiquities of England has not yet entirely recovered.

[a] No doubt Knighton Long Barrow, two miles due north from Stonehenge. "*Stonehenge*," p. 46; "*Abury*," p. 41. Stukeley maintained that the use of bronze celts was for cutting the mistletoe. *Stonehenge*, pp. 39, 46, tab. I. In speaking of another long barrow, likewise supposed by him to have been that of an Arch-Druid (loc. cit. p. 38), Stukeley pleads for "liberty in these kind of conjectures," in which he says "there is this present use, to affix thereby names to things, that we may talk more intelligibly about them."

[b] In the two Plates (XI. and XII.) Stukeley's sketches are very exactly reproduced. His names are repeated (in inverted commas) merely as a matter of curiosity. To eleven of the thirty-nine figures he has attached no titles; to these I have supplied designations, included within brackets. Most of these sketches and sections are very accurate: but for one or two I am not aware that there is any authority: especially I question Nos. 5, 6, and 7, in Plate XI.



"THE FORM OF THE BARROWS AT STONEHENGE IN SECTION" (From Stukeley.)



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"CELTIC SEPULCHRAL MONUMENTS AT ABURY." (From Stukeley)

"Druids"

1



(Bowl with perstaalith.)

2



(Long barrow with Cromlech.)

3



(Chambered Long barrow)

4



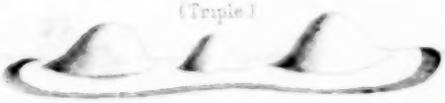
"Arch Druids"

5



(Triple.)

6



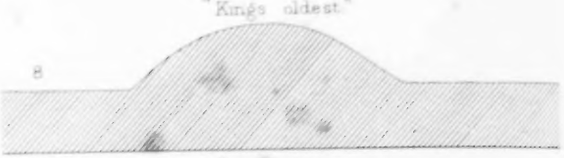
(Twin.)

7



"Kings oldest."

8



"Kings older."

9



"Kings old."

10



"Kings later."

11



(Twin)

12



(Twin)

13



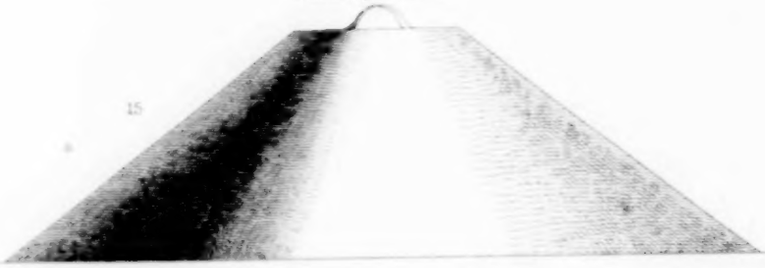
(Variety of Bell.)

14



(Silbury Hill.)

15



J. Thurnam, cur.ᵗ

Kell Bro.ˢ Lith. Castle St Holborn

Published by the Society of Antiquaries of London. 1869

On the other hand, Stukeley's merits in regard to barrows ought not to be overlooked. He was one of the first to excavate them and to record what he found. In conjunction with Thomas the eighth Earl of Pembroke, he opened nine or ten barrows near Stonehenge. Two of these were disc-shaped; the sepulchral character of which, discredited by Aubrey, he was the first to prove.[a] His excavations in the larger bell-shaped barrows were less successful, as in three out of the four, opened by him and Lord Pembroke, he failed to find the primary interment, having desisted before reaching the floor of the barrow, on meeting with secondary deposits--skeletons—at no great distance from the summit. In all three, cists scooped in the native chalk, and containing the primary interment of burnt bones with various ornaments, were found, about eighty-five years afterwards, by Sir R. C. Hoare and Mr. Cunnington.[b] To Stukeley we owe the appropriate designation of campaniform, or bell-shaped, as applied to the more elegant circular barrows surrounded by trenches.[c]

Another important observation of Stukeley's is that which refers to the relation of the roads formed by the Romans to certain tumuli adjacent to them. In three instances he shows that a Roman road passes across or encroaches upon a disc-shaped barrow, proving that the latter are earlier in date, and pre-Roman. Stukeley's accuracy in this statement may still be verified in the case of one, if not two, barrows at Woodyates, Dorset, and in that of another near Beckhampton, North Wilts; but all trace of that on the line of the Roman road near West Kennet is now obliterated.[d] The bowl- and bell-shaped mounds would doubtless

[a] In the two disc-shaped barrows opened by Stukeley, No. 149 and No. 159 of Sir R. C. Hoare's large map, he found a deposit of burnt bones in a hole scooped out of the chalk rock, but no urn; though in another place (*Stonehenge*, p. 10) he states that there "is commonly an urn" under the "small tump of earth in the middle."

[b] The four bell-shaped barrows are two sets of twin-barrows, No. 29 and No. 147 of Hoare (*Ancient Wilts*, i. 161, 200). The other barrows, bowl-shaped, of slight elevation, opened by Stukeley, were one of Group 14 and No. 16 of the same map. In both of these, as well as in another on Windmill Hill, near Avebury, he found the primary interment of burnt bones. (*Stonehenge*, p. 45, plate xxxi. *Abury*, p. 45.) In the Bodleian MSS. Stukeley names having opened "the little long barrow near Stonehenge;" but whether he means by this designation No. 17, No. 165, No. 170, or No. 173 of Hoare's map there is no evidence.

[c] I believe the first trace of this term is in the *Itinerarium Curiosum*, vol. i. 1724, p. 40; where Stukeley names "a curious barrow" seen by him at Souldern, Oxon, in 1712, which was "neatly turned, *like a bell*."

[d] *Itin. Cur.* i. 133, 180. *Stonehenge*, p. 9, plate iv. *Abury*, pp. 26, 45, plate viii. ix. The surveys of Sir R. C. Hoare fully confirm Stukeley, and supply other examples. (*Ancient Wilts*, i. 243. Comp. pp. 181, 187, 232, vol. ii. p. 36, Roman Æra, pp. 29, 39, 88, and accompanying maps.) Stukeley's statement, that the Roman road near Kennet deviates from the straight line in order to avoid Silbury Hill, has, as now proved, been needlessly questioned; though that it was posterior in date to the ancient works of

be avoided by the Roman road-makers; and it is precisely these inconspicuous flat tumuli which were liable to be invaded by them. The proof thus afforded of the prior date of the tumuli is the more important, as of all forms of British barrows the disc-shaped is probably the latest.

The next observations we meet with on the forms of the barrows are those by Sir R. C. Hoare, already referred to. The publication of the first volume of "Ancient Wiltshire" was completed in 1812; and in the Introduction to this work Sir Richard describes and figures no fewer than twelve different forms of barrow, all of which are probably of the British or pre-Roman period. He says, "I have marked the decided forms and the most prominent varieties, but many more of the latter might have been given."[a] Those he enumerates are—I. The Long barrow; II. Bowl barrow; III. Bell barrow; IV. Druid barrow; V. Druid barrow (No. 2); VI. Pond barrow; VII. Twin barrow; VIII. Cone barrow; IX. Broad barrow; X. Druid barrow (No. 3); XI. Druid barrow (No. 4); and XII. Long barrow (No. 2). It may, however, be shown that of these forms the first four only are distinct types, and that the remaining seven[b] are varieties of

Avebury is clear from its bisecting the eastern avenue of that great temple, just as the Roman road near Woodyates crosses the curious British "cursus" of Vindogladia. (*Ancient Wilts*, Roman Æra, p. 29). Stukeley, with reason, employs a similar argument to prove the British character of the Wansdyke, in his account of the curious junction of the Roman road with that celebrated boundary on Calston Hill, where "the bank of the dike is thrown in (down a precipice) in order to form the road." (*Abury*, p. 27.)

[a] *Ancient Wilts*, i. 20-23, with three folio plates of the several forms.

[b] I do not include No. VI. or "Pond-barrow," a misnomer introduced by Sir R. C. Hoare, it not being a barrow at all, but a circular excavation in the surface, similar to what might be made for a pond. The name "barrow" (Anglo-Saxon *beorh*, a hill,) necessarily involves the idea of a mound or heap, and, as applied to sepulchral monuments, implies a grave-mound: it is entirely inapplicable to such hollows as are here referred to. These circular excavations are often found among or adjacent to the barrows of Wiltshire, but the area within has scarcely ever yielded traces of interment. Sir Richard (*Ancient Wilts*, i. 22), and, as I find from the MS. notes kindly lent me by his son, the late Rev. E. Duke, of Lake House, Wilts, excavated the centre of three without finding sepulchral or other remains; in a fourth, however, in a hole in the chalk, ther was a deposit of burnt bones. Dean Merewether opened others in North Wilts, and the Rev. J. H. Austen one in Purbeck, Dorset, (*Salisbury vol. of Arch. Institute*, p. 85; *Papers of Purbeck Society* for 1858,) and found nothing. I have also dug into two or three, including that marked No. 14 on Winterbourn Stoke Down (*Ancient Wilts*, i. 121), with the same negative result; save only that in one (No. 94 or 97, *Ancient Wilts*, i. 168), a mile to the north of Stonehenge, I found the skull and bones of the right arm of a woman *in situ*. The absence of the left arm and of the lower part of the skeleton was remarkable, and showed that the body had been dismembered before burial, which was probably long subsequent to the formation of the cavity. Stukeley opened one near Stonehenge (*Stonehenge*, p. 45), and found nothing but a bit of red pottery. He speaks of them as "circular dish-like cavities dug

quite secondary importance. In such a fourfold classification Sir Richard himself ultimately acquiesced.[a] Those called by him Cone and Broad are in fact varieties of the Bowl barrow, of little importance, just as are Nos. 2, 3, and 4 of the so-called Druid barrow (No. 1). No. XII. or the Long barrow (No. 2)—the Oval barrow—with a trench all round, is, as I shall show, a compound variety of the bowl barrow; whilst No. VII. the Twin barrow, consists of two barrows, bowl- or bell-shaped, as the case may be, generally the latter, surrounded by a common ditch.

The classification of barrows by their outer form has often been objected to. I am not, however, aware of any geologist of repute who "makes out the barrows to be diluvial formations left by the flood and other waters," though this has been gravely asserted by a writer in the Edinburgh Review as an objection to Sir Richard Hoare's classification.[b] Mr. T. Wright objects to it on grounds less visionary, though to myself not convincing; and regards the outward forms of barrows as "frequently due to accidental circumstances."[c] Even the late Mr. Kemble objects to the distinction as "unnecessary," and would designate all barrows, he says, whether long, bell, or Druid, under the general name of conical graves, the *kegelgräber* of the Germans.[d] I believe, however, that when kept within proper limits the distinction by outer form is well founded, and that such will appear in the course of these papers.

There is nothing to object to in Sir R. C. Hoare's designations of the three first of his primary forms of the long-, bowl-, and bell-shaped barrow. That of Druid-barrow, which he adopts from Stukeley, and by which he designates his fourth form, is, however, very objectionable; and, as involving a hypothesis without probable basis, ought to be abolished. I have for several years past designated this species of barrow by the term disc-shaped, which appears sufficiently to characterise the form, which is that of a circular shallow dish inverted. Adopt-

in the chalk, like a barrow reversed;" and elsewhere calls them "barrows inverted." (*Abury*, p. 12.) His view of their use as "places for sacrificing and feasting in memory of the dead" is not unlikely. The earth and chalk excavated from them would be employed, we may suppose, in the completion of one or more of the adjacent barrows, whilst the hollow itself was perhaps temporarily roofed in, so as to form a place of shelter during the time occupied by the funeral ceremonies and in the formation of the barrows.

[a] *Ancient Wilts*, ii. 1821, 109. *Modern Wilts.* Ambresbury, 1826, p. 54. Compare *Tumuli Wiltunenses*, 1829, p. 5.

[b] *Edinburgh Review*, "*Bards and Druids*," July 1863, p. 59.

[c] *Celt, Roman, and Saxon*, 1852, p. 50. 2nd ed. 1861, p. 50. *Journ. Brit. Arch. Assoc.* 1847, vol. ii. p. 50.

[d] *Arch. Journal*, 1855, xii. 387.

ing these four primary forms, with their really important modifications, I propose further to classify the barrows of this part of England according to the following scheme:

CLASSIFICATION OF BARROWS.[a]

		Examples in Plates XI. and XII.
I. LONG BARROWS. (*Stone period*).		
1. SIMPLE OR UNCHAMBERED LONG BARROWS.		Pl. XI. 12, 14.
2. CHAMBERED LONG BARROWS.		,, XII. 3, 4, 5.
II. ROUND BARROWS. (*Bronze period*).		
1. BOWL-SHAPED BARROWS	*a*. Simple bowl-barrows	,, XI. 8, 10, XII. 8, 9.
	β. Trenched ,, ,,	,, ,, 15, 16, 17, XII. 10.
	γ. Composite bowl or Oval barrows	,, ,, 9, 13.
2. BELL-SHAPED BARROWS	*a*. Simple bell	,, ,, 18, 19, XII. 11, 14.
	β. Twin	,, ,, 20, 21, 22, XII. 7, 12, 13.
	γ. Triple	,, XII. 6.
3. DISC-SHAPED BARROWS	*a*. Simple—with flat area	,, ,, 1.
	β. With one, two, or three small central tumuli	,, XI. 1, 2.
	γ. With one low mound nearly covering the area	,, ,, 3, 4.

But, though the outer form is important, there can be no satisfactory classification of barrows which does not likewise refer to their internal contents. The scheme I propose is intended to group them in the order of their relative antiquity. In none of the first class, or long barrows, whether unchambered or chambered, have objects of metal, either bronze or iron, been found; and, so far as we know, they are of the Stone period. In the second class, or round barrows, not only are there objects of stone, but also, and chiefly, those of bronze, and in very rare instances of iron also. They may be regarded, therefore, as belonging to the Bronze period, and to that of Bronze and Iron transition.

It will be convenient to divide the subject into two parts: I. Long barrows; and II. Round barrows; and to treat of them separately.

[a] Nos. 5, 6, 7, 11, 23 and 24 in Plate XI., and Nos. 2 and 15 in Plate XII. are not classed. The occurrence of 5, 6 and 7 may be questioned; Nos. 23 and 24 are not barrows, and No. 15, Silbury Hill, has not been proved to be sepulchral. No. 11 in Plate XI. and No. 2 in Plate XII. are rare and exceptional forms.

I. LONG BARROWS;

And in the first place—1. ***Simple or Unchambered Long Barrows.***

> The long tombs in Gwanas!
> There has been found none who can their age determine,
> Or tell who claims or who disowns them.[a]

Geographical Distribution.—In no county of England are Long Barrows so numerous as in Wiltshire, where I count as many as sixty of these large grave mounds, of which eleven in the north of the county are chambered.[b] If we estimate, as I think we may, the barrows of all sorts in the county at 2,000 in number,[c] this will give a proportion of one long barrow to about thirty-five round barrows. Of the whole number, as many as forty-five are in the area represented by Sheet XIV. of the Ordnance Map, which extends over only about half of the county; and of these again, as many as twenty-four are on that part of Salisbury Plain, occupying less than one-fourth of the whole sheet, which lies between the valley of the Salisbury Avon on the east and Warminster on the west, and between the Vale of Pewsey on the north and that of Wily on the south. In no other part of England are long barrows so numerous as on this part of Salisbury Plain, where, in an area of 150 square miles or thereabouts, we have on an average one in every six square miles.

[a] "Stanzas of the Tombs of British Warriors," in *Myvyrian Archaiology*, vol. i. "There is here a remarkable confirmation of the theory which places the long barrows in the first class of sepulchral earthworks, a theory founded not only on the primeval form of the ground following the form of the human body, but also on the fact that the relics discovered in such graves indicate the lowest stage of civilization; . . . and never, as it appears, include any metallic implements." The Rev. John Williams (Ab Ithel, (*Arch. Camb.* 1852, N. S. iii. 81) here seems to refer to Dr. Daniel Wilson's excellent *Pre-Historic Annals of Scotland*, ed. 1, pp. 48, 54.

[b] The Rev. W. C. Lukis enumerates only "about thirty long barrows in Wilts" (*Wilts Arch. and Nat. Hist. Mag.* 1864, viii. 156); but there are, in truth, considerably more than this number, or at least forty-five, within the area of Sheet XIV. of the Ordnance Map, which embraces about half the county. The Ordnance Surveyors themselves show on this sheet twenty-four, or, counting those which though really long are shown by them as circular, thirty long barrows.

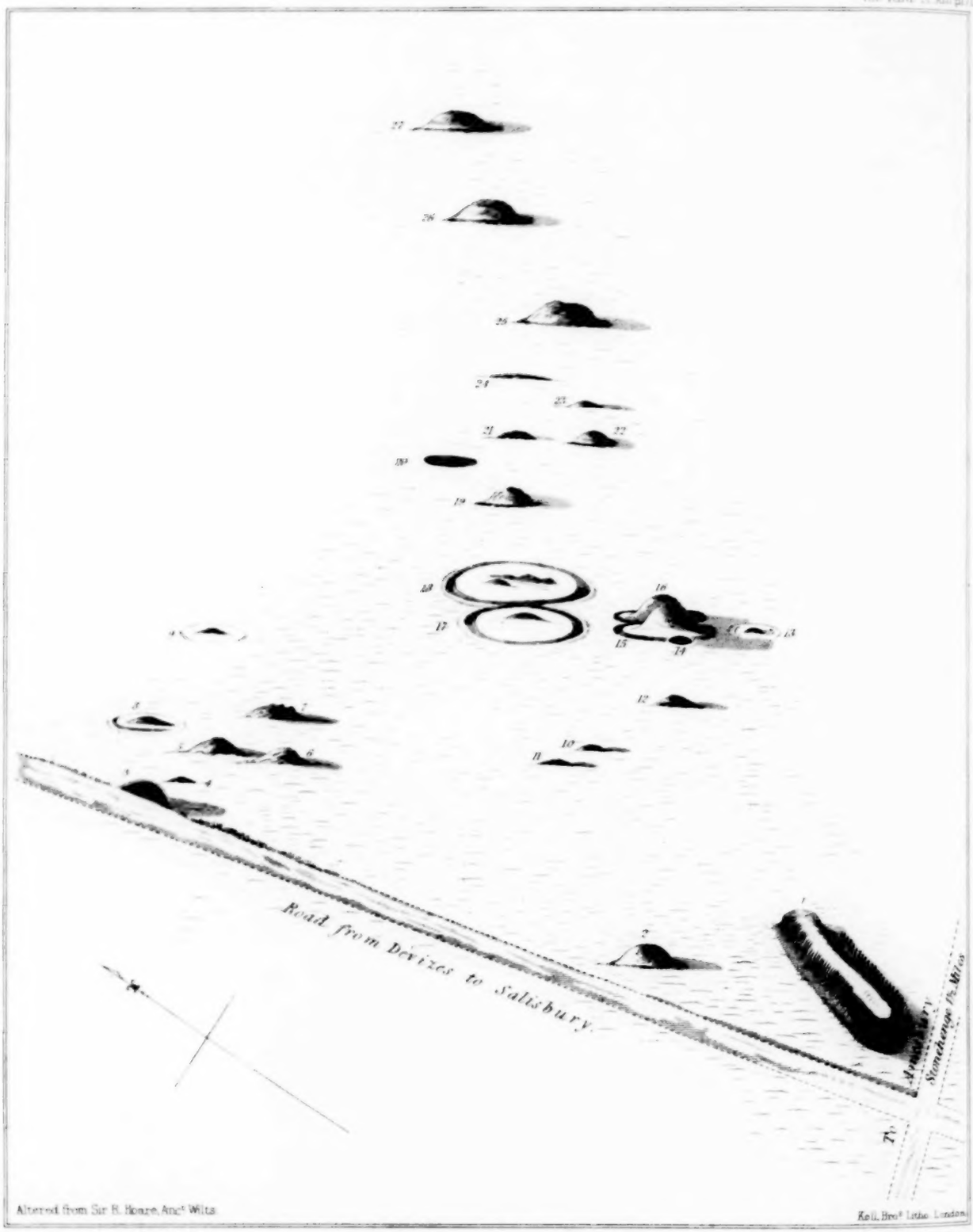
[c] In this rough estimate I include the barrows levelled since the explorations of which there is the record in "*Ancient Wilts.*"

In the adjoining maritime county of Dorset, though the circular barrows are very numerous, long barrows are of comparatively infrequent occurrence. Mr. Warne tells us that "the examples on the coast are but few," whilst they are "comparatively numerous in the interior (and northern district) of the county," on the borders, that is, of Wiltshire. Mr. Warne draws especial attention to this fact, confessing himself "at a loss for a satisfactory elucidation."[a] On examination of Mr. Warne's useful and very beautiful Illustrated Map, and its accompanying Index, I find a record of no more than twelve long barrows in the whole of Dorsetshire, the area, however, of which falls short of that of its northern neighbour by about one-fourth. The long barrows of other counties adjacent to Wiltshire, as those of Somerset and Hants, so far as my observations and inquiries have extended, are quite as rare as those of Dorsetshire. In Gloucestershire only, the chambered long barrows—to be hereafter referred to—are somewhat more numerous; but even here they are of much less frequent occurrence than the simple long barrows of central and southern Wiltshire. In the more eastern, midland, and northern counties the long barrows, as compared with the round barrows of the same districts, are still more rare. One, called Julaber's grave, at Chilham in Kent, was opened in the last century by Mr. Finch; and further on I append in a note the results.[b]

In Derbyshire a few tumuli have been described as long barrows by the late Mr. Bateman; but I am by no means certain that every one of them does not differ in some material respects from the true long barrows of Wilts, Dorset, and Gloucestershire. On the wolds and northern moors of Yorkshire, districts abounding in circular barrows, or as they are there called, from their Norse name, *howes*, and redundantly *howe-hills*, I can from my own observation, confirmed by that of my friend Mr. Greenwell, assert their great rarity. Still they do occur,

[a] Warne, *On the Primeval Archæology of Dorsetshire*, Proc. Gloucester Congress of Archæological Association, 1846; *Celtic Tumuli of Dorset*, 1866, p. 8; *Dorsetshire, Index to its Vestiges, &c.* 1865, p. 28, Illustrated Map. Mr. Warne observes that "the long barrow (of Dorset) has been, of the whole sepulchral series, the least explored, its colossal size presenting obstacles of a comparatively insuperable character." 1846. In his recent work he says, "The extent of labour attendant upon an efficient exploration of the long barrows has hitherto prevented my undertaking the task; an important and interesting inquiry is therefore still open, and awaiting a systematic investigation." *Celtic Tumuli of Dorset*, p. 8.

[b] Stukeley, in his "*Itinerarium Curiosum*," names two long barrows in the Midland Counties, viz. that called Mill Hill, standing east and west near Dunstable (vol. i. p. 109), and that known as Shipley Hill, at Cossington, in Leicestershire (p. 102). This last is of very great size, and equals, or exceeds, in some of its dimensions that near the Old Ditch, Tilshead, Wilts.



BIRD'S EYE VIEW OF BARROWS ON WINTERBOURN STOKE DOWN, WILTS.

Published by the Society of Antiquaries of London, 1869.

and Mr. Greenwell has excavated one at Scamridge, one on Willerby Wold, and two others near Rudston, in the East Riding.[a]

To the same effect is Professor Dr. D. Wilson's testimony as regards Scotland, in which he tells us that the long barrow is "comparatively rare."[b]

Disposition and Arrangement.—The disposition and arrangement of the long barrows, in relation to each other, are circumstances as to which they materially differ from the round barrows. These last are commonly found to occur in groups or clusters, whereas the former stand apart and are isolated. It is a very rare circumstance to find two within sight, or even within a mile's distance, of each other; and generally they are at least two or three miles apart. In Wiltshire I know of only one decided exception to this rule, being that in the parish of Milston, on the very confines of Hampshire, where a small but true long barrow is seen to lie parallel with another of average proportions, and is only separated from it by an interval of about one hundred yards. At Knowl Hill, on the southern border of the county, near Fordingbridge, are two long barrows of large size, which I have not myself seen, but which are laid down on the maps much nearer to each other than is at all common.

As a rule, long barrows occupy the highest points on the downs, in situations commanding extensive views over the adjoining valleys, and so as to be visible at a great distance. Salisbury Plain may be said to be guarded as it were by a series of such long barrows, which look down upon its escarpments like so many watch-

[a] Dr. Young (*History of Whitby*, 1817, ii. pp. 657, 676) writes of the long barrows of the northern moors of Yorkshire in general, and of those at Scamridge in particular, as follows:—"A very few (of the houes) are of the shape which Dr. Stukeley calls *pyriform*, being oblong, and rounded at both ends, but broader at one end than at the other. The only instances of this kind which I have noticed are (two) at Scamridge, near Ebberston. They are of stone, and of a considerable height and length, and have a circular depression on the top near each end." The larger, called Robhoue, is described as 40 yards long, 20 broad at the east end, and 9 or 10 at the west; the other as not much above half this size. They seem to have been two or three hundred feet apart. The smaller, apparently, was "much mutilated" when Dr. Young wrote, "a great part of the stones having been carried off, by which means many bones have been thrown out." It was the larger mound which, nearly half a century later, was excavated by Mr. Greenwell. (*Arch. Journal*, xxii. 102.) Another Yorkshire long barrow was supposed to be that at Dinnington, near Rotherham, excavated and levelled by the proprietor, J. C. Athorpe, Esq., of which some account has been given in the *Memoirs of the Anthropological Society*, i. pp. 132, 478,—*On the Two Principal Forms of Ancient British Skulls*, 1865, pp. 13, 68. This would seem, however, to have been really a circular barrow, the sides of which had been cut away. Rolleston, *Journ. Anat. and Phys.* 1868, iii. 254.

[b] *Pre-Historic Annals of Scotland*, 1851, p. 48.

towers. Others occupy elevated central spots on the interior of the plain; and some of these, as Ell-barrow and Knighton-barrow, are well-known landmarks to the hunter and wayfarer over these extensive and (in winter) dreary downs.

Several of the clusters of round barrows near Stonehenge are grouped around, or in close proximity to, a single long barrow. On inspecting such a group as that on Winterbourn Stoke Down, where out of twenty-seven tumuli we find a single long barrow (see Plate XIII.), or as that on Lake Down, where to twenty-three circular barrows of various forms we also have one long barrow,[a] it might at first be thought that the long and circular barrows were of the same date, and that the elongated tumulus, as well as the variations in the forms of the round barrows, had its origin merely in the taste or caprice of those by whom it was erected.[b] Knowing, however, as we do, that the examination of the long barrows discloses an entirely different method of sepulture, and indicates a much earlier epoch than does that of the round barrows, we come rather to regard them as the burial-places of an earlier race, probably the original possessors of the soil, around which the tombs of a later and more cultivated people were afterwards erected. As a rule, these tumuli stand apart from those of circular form.

External form.—The long barrows are for the most part immense mounds, varying in size, from one or two hundred to three and even nearly four hundred feet in length, from thirty to fifty feet in breadth or upwards, and from three to



Fig. 1. A long Barrow. (*After* Sir R. C. Hoare.)

ten or even twelve feet in elevation. Along each side of the whole length of the tumulus is a somewhat deep and wide trench or ditch, from which trenches no doubt a great part, or sometimes even the whole, of the material of the mound was

[a] *Ancient Wilts*, i. 121. "Group of Barrows on Winterbourn Stoke Down," (see our Plate XIII.); and p. 209, plate, "Barrows on Lake Down." In a MS volume in the Stourhead Library (vol. iii.), the elder Cunnington, describing the various forms of barrows in the group of eighteen on Wilsford Down, adds, "but wanting a *long barrow* we cannot consider this a perfect group, like that on Winterbourn Stoke (and, he might have added, like that on Lake) Down."

[b] Our Plate XIII. *Bird's-Eye View of Barrows on Winterbourn Stoke Down*, is copied, by the kind per-

dug, but which it is very remarkable are not continued round the ends of the barrow. This characteristic is not dwelt on by Sir R. C. Hoare[a] or by Mr. Cunnington in their descriptions, though it affords an important means of distinguishing the truly ancient British long barrow from certain elongate grave-mounds of later epochs with which it has at times been confounded. In by far the greater proportion of long barrows, the mound is placed east and west or nearly so, with the east end somewhat higher and broader than the other. Under this more prominent and elevated extremity the sepulchral deposit is usually found, at or near the natural level of the ground; but, although this is the general rule, a certain proportion depart decidedly from such a system of orientation, being placed pretty nearly north and south, and this is an arrangement which I find obtains in about one out of six of our Wiltshire long barrows.[b] In this case, as I have found by excavations, sometimes the south and sometimes the north end is the higher and broader of the two, and covers the sepulchral deposit.

Certain varieties in the form of the mound have been adverted to by both Stukeley and Hoare. Some are described as resembling an egg or a pear cut longitudinally, the latter constituting the pyriform barrow of Stukeley.[c] Others, in which there is comparatively little difference in the width of the two ends, are said to be wedge-, ridge-, or roof-like in shape, or they are compared to the keel of a ship inverted; these last forming, as sometimes supposed, the "ship-barrows" of the northern antiquaries.[d] All these varieties and peculiarities of form, however, seem to be very unimportant, and to have depended on the fancy, or the greater or less care and skill, of those employed in their construction.

Distinction from Elongate Tumuli of exceptional character.—It is essential to

mission of Messrs. Nichols, from that in the *Ancient Wilts*, certain errors therein only being corrected. The artist had shown trenches round several of the bowl-shaped barrows, which trenches have no existence.

[a] It is not adverted to in his formal descriptions, but Sir Richard refers once to this characteristic in the body of his work (*Ancient Wilts*, i. 89).

[b] The Rev. W. C. Lukis enumerates three Wiltshire long barrows (*Wilts Arch. and Nat. Hist. Mag.* viii. 156) as lying north and south. I count, however, as many as eleven; viz., 1. Horton; 2. Shalbourne; 3. Fittleton; 4. Stonehenge (No. 165); 5. Stonehenge (Cursus); 6. Knook; 7. Scratchbury; 8. Arne Hill; 9. Brixton Deverell; 10. Knowl Hill; and 11. a small long barrow about a mile south of the inn on the Plain called the Druid's Head. In Nos. 2, 9, and 10, I rely on Sir R. C. Hoare's, and on other, maps and descriptions; in the rest on my own observations.

[c] Stukeley, *Abury*, p. 45.

[d] Hoare, *Ancient Wilts*, i. 92, ii. 109. Sir R. C. Hoare here quotes the description of Olaus Wormius, "Regii tumuli, ad magnitudinem et figuram carinæ maximæ navis." Ol. Worm. *Mon. Dan.* p. 43.

distinguish from the true primeval British long barrow certain other varieties of tumulus which are very liable to be, and have often been, confounded with it; though differing entirely as regards their epoch and the peoples by whom they were constructed. There are three or four forms of tumulus which must be thus distinguished.

1. That which I have ventured to denominate the Oval barrow, and which is at once recognised by having the trench continued around both ends of the mound.[a] This is really a multiple round barrow—two or three circular barrows, each the seat of a separate interment for the most part after cremation, being combined into one oval mound. Sir Richard Hoare himself distinguishes this variety of tumulus as "XII. Long barrow No. 2," and says it "differs very materially from those of the larger sort."[b] "Long barrow No. 2" is, however, in every way an objectionable name; and it is better to give it an entirely different designation. In these papers, under the name of the Oval Barrow, it will hereafter claim our attention. It is doubtless late-British of the bronze and pre-Roman period, like the round barrows with which it must be classed.

2. Another variety of elongate grave-mound, which may be confounded, on cursory observation, with the true primeval long barrow, is really of the Romano-British period. Such are the low oblong mounds sometimes met with immediately outside of camps occupied by the Romans, and of which that on White Horse Hill, Berkshire, excavated by the late Martin Atkins, Esq. F.S.A. and described by myself,[c] is an excellent example. Though larger, it is very similar in external form to others seen on Bathampton and Lansdown Hills near Bath; and like them is an oblong mound rising a foot or two above the turf, which but for the slight ditch surrounding it would almost pass unobserved. This Berkshire example is about eighty feet in length and forty in breadth, and is further distinguished from the ancient British long barrows by its equal width and height at both ends. When explored, it was found to be occupied through almost its entire extent with skeletons stretched at length, lying for the most part east and west, and accompanied by various unequivocally Roman remains.

3. Some other ancient oblong grave-mounds without lateral ditches, are probably of a still later date than those last referred to, and may be of the Christian period, and perhaps of some century of our era between the fifth and the eighth.

[a] I have described the *Oval barrow* in the *Proc. Soc. Antiq.* 2 s. ii. 427, June 16, 1864, where several examples are noticed.

[b] *Ancient Wilts*, i 22, 242.

[c] *Crania Britannica*. Descriptions of Skulls, pl. 51, XL.

Such, I think, is the oblong tumulus at Crawley, in Oxfordshire, which was examined by Mr. J Y. Akerman, F.S.A. in 1857;[a] and more fully, in 1864, by Professor Rolleston and myself. No objects of art were found, beyond two small buckles, one of brass and one of iron, probably belonging to some articles of dress in which the bodies had been interred, a small canula made from a bird's bone, and a few scattered shards of Romano-British pottery. The tumulus was full of skeletons ranging east and west, with the feet chiefly to the east. The crania, divided between the collection of the Oxford University Museum and my own, are very brachycephalous. This burial mound seems to me to belong to a period between the departure of the Romans and the final establishment of the Anglo-Saxons in this part of Oxfordshire.

4. Lastly, some Anglo-Saxon cemeteries have been excavated in mounds of elongate form and slight elevation, which might loosely be called long barrows. Such was that explored by the late Hon. R. C. Neville (afterwards Lord Braybrooke) at Linton Heath, Cambridgeshire, and which measured 160 feet in length by 85 in breadth.[b]

Relation of Long Barrows to Belgic Dykes and Roman Roads.—The position of some of the long barrows in relation to the very ancient earthworks known as Belgic dykes is indicative of the superior antiquity of the former. The earthwork (bank and ditch) which stretches across Salisbury Plain from north-east to south-west, and is laid down on the Ordnance and other maps as "Old Ditch," is especially prominent near Tilshead, where is one of the largest of our long barrows, measuring as it does 380 feet in length and 11 feet in height. On reaching the east end of this mound, which is situated on its north side, the ditch "makes a decided curve in order to avoid the tumulus," which, as Sir R. C. Hoare justly observes, "is a certain proof of the superior date of the barrow."[c] Another example is on the southern border of the county, near the villages of Martin and

[a] *Archæologia*, xxxvii. 432. The subsequent researches justify, it will be seen, Mr. Akerman's conjecture that this sepulchral mound is "of the late Romano-British period." It has, however, as I have shown in the text, no claim to be regarded as "one of the class termed by antiquaries long barrows," though, regarding merely its form, it might be so termed.

[b] *Arch. Journal*, 1854, xi. 95.

[c] *Ancient Wilts*, i. 90. This ditch is described by Dr. Guest, in his paper "On the Belgic Ditches," *Arch. Journal*, 1851, viii. 147, 148. "When these mounds" (Dr. Guest gives two mounds to the dyke) "approach the 'long barrow,' which lies about a mile from Tilshead, they turn at right angles, and, after having half inclosed the mound, pursue their former course. Our best chance of explaining anomalies like these would be a really critical edition of the 'Gromatici veteres.'" In this paper, the barrow in question is designated "Tilshead Old-ditch Long-barrow." (See Table 1, *post.*)

Tippet, where the course of a branch of Bokerley Ditch has been diverted, "in order to avoid a long barrow;" which, as Sir Richard again says, "proves the high antiquity of the sepulchral mound."[a]

Previous Conjectures.—The long barrows were a source of much perplexity and doubt to their first explorers on a considerable scale,[b] at the beginning of the present century,—Mr. William Cunnington and Sir R. C. Hoare. In the library at Stourhead, collected by the latter, is a manuscript volume containing copies of letters addressed by Mr. Cunnington to Mr. Wyndham, the Wiltshire antiquary of those days, from which I find that Mr. Cunnington at one time inclined to think the long barrows of more recent origin than the round, but implies that he had ceased to do so. Mr. Wyndham, it seems, entertained the notion that the

[a] *Ancient Wilts*, i. 233. On this page Sir Richard gives good reasons for believing that Bokerley Ditch is of earlier date than the Roman road from Old Sarum to Dorchester, by which the former is crossed, near this long barrow. The long barrow referred to appears to be the same as that noticed by Mr. Warne, and illustrated with a wood-cut at page 5 of his "*Dorsetshire, its Vestiges; Index to Illustrated Map.*" What Sir R. C. Hoare calls a branch of Bokerley Ditch Mr. Warne, probably more accurately, regards as a "trackway." Dr. Guest (*ubi supra*) regrets "that Sir R. C. Hoare was not more alive to the importance of distinguishing between the trackway and the boundary-dike."

[b] The earliest opening of a long barrow of which I find any record is of that at Chilham, in Kent, called "Julaber's grave." Julaber, popularly fancied to have been a giant or a witch, was by Camden conjectured to have been the same as the Quintus Laberius Durus named by Cæsar (B. G v. 15), and this to have been the grave of that military tribune (Camden, *Britannia*, by Gough, i. 314, 354). Stukeley gives representations of the tumulus, from which it is evident that it is a true ancient British long barrow (*Itin. Cur.* ii. plate 56, 57; cf. plate 54). It was explored in 1702, at the desire of the first Lord Weymouth, by Heneage Finch, afterwards Earl of Winchelsea (*Nichols's Illustrations of Literature*, 1822, iv. 96. See also Battely, *Antiq. Rutupin.* 1745, p. 109; *Antiquities of Richborough*, 1774, p. 109; Hasted, *Kent*, 1790, iii. 140). Mr. Finch describes the barrow as lying nearly east and west, as more than 180 feet long, 40 feet broad, and 7 or 8 feet high. It was examined by digging trenches from the centre, 21 feet in length, towards the east. This most probably fell short of the actual sepulchral deposit, but sufficient was disclosed to show its conformity with other true long barrows. After digging five feet through chalky earth and finding pieces only of the thigh-bones of a large animal (ox ?), a stratum of dark moist earth, two feet thick, regularly spread over the natural chalk rock, was met with. In this were a few bones, mostly so rotten that they crumbled in handling, but whether those of men or animals was not determined. There were also some pieces of deer's horns; two or three large teeth, supposed to be those of horses; and some bones of birds, in size and form like the thigh-bones of pullets. Mr. Finch was of opinion that the barrow must have been "thrown up at once," and not "without a great many hands." He did not think it could be the burial-place of a family, in consequence of the regularity of the dark stratum, which in such case he rightly thought would have been "in patches, and not in a straight line." I will only add, that it is not improbable that the true sepulchral deposit of skeletons may yet remain intact at the east end of this long barrow.

long barrows had been raised over those who had fallen in war, and Mr. Cunnington thought that the appearances in Bowl's barrow[a] favoured that view. Sir Richard Hoare combats this opinion, and says, "Others have supposed them to have been battle barrows, from the circumstance of finding the bodies thrown promiscuously together, without any attention to the usual revered rites of sepulture; but I can hardly suppose that such immense mounds would have been raised for that purpose, as the interments are in general confined to the broad end of the tumulus."[b] Another view was rejected by Hoare, for reasons we must be allowed to regard as not conclusive. "At first sight," he says, "we should suppose them erected in honour of some great chieftain or the head of some British clan, but on opening them these surmises vanish, for they contain no gilded (bronze) dagger, no stone celt, not any of those articles that might lead to a supposition of riches or grandeur."[c] And, again, "By the want of such articles of luxury and dress, we may be induced to suppose that they were appropriated to the interment of the lower class of people. Still it must appear wonderful that such gigantic mounds of earth, extending to three or four hundred feet (in length), should have been raised for the deposit of a few human bodies."[d] But though thus baffled and diverted from the probable opinion, as I hope to be able to show, that they were the tombs of chieftains, Sir Richard was convinced, from the absence of all objects of metal, of their great antiquity, and was evidently disposed to place them prior to the round barrows in the chronological scale. "Their high antiquity," he says, "is confirmed by the fragments of rude British pottery, stags' horns, &c. found in the soil that composes them, and from the circumstance of cremation having been practised near the top of some of them."[e] He confesses, however, that, after all the "expensive and continued researches in them" of himself and colleague, he must allow that "their original purport was still involved in obscurity, and that a further explanation of them would be a great desideratum."[f] The desideratum thus referred to I trust in some degree to supply, and at the same time fulfil the expectation I held out to this Society some years ago, viz. that I would report the results of further researches in the long barrows of Wiltshire, and make some general observations in regard to their age, and to the people by whom they were probably erected.[g]

[a] *Ancient Wilts*, i. 87. *Mem. Anthrop. Soc.* 1865, i. 472.
[b] Ibid. i. 92.
[c] *Modern Wilts*, Hundred of Ambresbury, 1826, p. 54.
[d] *Ancient Wilts*, ii. 110. Comp. *Tumuli Wiltun.* 1829, p. 5.
[e] *Ancient Wilts*, i. 92.
[f] *Modern Wilts*, Ambresbury, p. 57.
[g] *Archæologia*, xxxviii. 407.

Researches of Cunnington and Hoare.—Mr. Cunnington—whose claims to the regard of the lovers of our primeval antiquities are somewhat obscured under the shadow of his better-known coadjutor, our munificent Wiltshire Baronet—opened the greater number of the long barrows described in "Ancient Wilts;" and in 1804, shortly before he became associated with Sir Richard Hoare, in a paper in the Archæologia, summed up his observations on them as follows: "Of eleven long barrows which I have opened nine have produced skeletons at the wide ends lying by a cist or cists; the tenth, a large quantity of burnt human bones; and the eleventh, one skeleton, interred near the centre of the barrow, three feet beneath the native soil."[a] He also mentions finding the skulls of oxen, in three or four instances, near the human remains; also deers' horns, the skeletons or bones of large birds, and pieces of rude British pottery. He insists, likewise, on the absence of urns, weapons, and ornaments, such as are found in the circular barrows. Sir Richard Hoare sums up his description of the long barrows in very similar terms: "We have never found any brass (bronze) weapons or trinkets, incense or drinking cups, deposited with the dead, nor the primary interment burnt and deposited within a funeral urn. With a very few exceptions, we have always found skeletons on the floor of the barrow at the highest and broad end, which generally points to the east, lying in a confused and irregular manner, near one or more circular cists cut in the native chalk, and generally covered with a pile of stones or flints."[b]

In the first volume of his great work Sir Richard records the details of the opening of sixteen long barrows,[c] which were explored either by himself or colleague, chiefly by the latter. They are arranged in the first part of the tabular view, on page 180, under letter A. In only eight of these sixteen instances are, I think, the details of a kind to warrant the conclusion that the primary interment was actually disclosed or at all satisfactorily examined. (A. IV. V. VII. VIII. IX. XIV. XV. XVI.) Three of the remaining seven have been reopened

[a] Vol. xv. p. 345; comp. 340. On abstracting and comparing the description of the sixteen long barrows in "Ancient Wilts" I cannot make the analysis accord, so far as was to have been expected, with the brief summary given by Mr. Cunnington in the Archæologia.

[b] *Ancient Wilts*, i. 21, 92; ii. 110; *Modern Wilts*, Ambresbury, pp. 54, 57; *Tumuli Wiltun.* p. 5. In the text I have combined into one Sir Richard's statements found in these various places in his works.

[c] A seventeenth was attempted without success; see B. xv., in Table 1, *post*. There are notices of the excavation of five or six other so-called long barrows; but these were, I believe, all *oval* or *multiple circular barrows*, as defined above.

by myself, with the result of satisfactorily disposing of the history of two (x. xii.), and of adding important particulars to that of another (ii.)[a]

Researches of the Writer.—An abstract of my own experience in the excavation of simple long barrows is given in the second part of the same tabular view, under letter B. Altogether, counting those previously operated on by others, I have opened twenty-one of these long barrows. In eight or nine of this number the exploration has proved entirely satisfactory; the primary interments having been disclosed and carefully examined, and the whole yielding skeletons and crania. One or two opened by my predecessors disclosed nothing fresh;[b] but generally speaking, even in the less satisfactory explorations, where I had been preceded by unknown barrow-diggers, the probable position and character of the primary interments were ascertained, or otherwise secondary interments were disclosed, or particulars were brought to light of more or less importance to the right comprehension of this class of barrows.

It is expedient to combine in one view the long barrows opened by my predecessors and by myself, and then to give the results to be deduced by an analysis of the entire series.

Analysis of the Table.—In the double table (A. and B.) are thirty-one long barrows, as to which the position and character of the primary interment were made out satisfactorily in fifteen, and less satisfactorily in seven, or in all in twenty-two cases. In nine other instances (Nos. 2, 5, 9, 10, 18, 20, 21, 26, 29) the result was more or less ambiguous, and in some (as Nos. 10, 26, 29) it must be allowed that the interment was not discovered.

Number of Skeletons.—Of the entire number of twenty-two there were twenty-one in which a skeleton, or more usually a pile of many skeletons, was found on or near the natural level at the base of the mound, and generally below the broad and high end of the tumulus, which is usually directed to the east. In seven cases there seems to have been a single skeleton; in two cases there were two, in two three, in two four, in two eight, in one fourteen, in one eighteen, and in four an indefinite number, described as "several" or "a great many" skeletons. In the remaining or twenty-second instance (No. 6), the primary deposit appears to have consisted of the burnt bones of as many as seven or

[a] I have likewise re-opened No. IV. and, I believe, ascertained the true position of the interment, left somewhat doubtful by the vagueness of Sir R. C. Hoare's description, (*Ancient Wilts*, i. p. 66,) where, for "near the centre," we ought, I think, to read, *near the east end*. Here, at least, we discovered a "cist" or hole in the chalk rock, and, close by, the fragments of a disturbed skeleton.

[b] From one of them, Bowl's barrow (IX.), I obtained several skulls left behind by Mr. Cunnington.

TABLE 1:—EXPLORATIONS IN UNCHAMBERED LONG BARROWS, IN WILTSHIRE.

A.—By W. Cunnington, Esq., and Sir R. C. Hoare. 1800–1808.

Nos.		Locality and Name.	Page in *Ancient Wilts.*	Result of Exploration.			References.
				General Result.	Primary Interments.	Secondary Interments.	
1	I.	Rodmead	i. 47	Rifled before...	Several disturbed skeletons	— —	
—	II.	Bratton	i. 55	Not successful	— —	Secy interments found ...	See B. XVIII.
2	III.	Arn Hill	i. 65	Not successful	— —	Secy interments found	
3	IV.	Warminster	i. 66	Successful ...	One skeleton	— —	See B. XXI.
4	V.	Heytesbury	i. 71	Successful ...	Many skeletons ...	None.	
5	VI.	Boreham, "*King Barrow*" ...	i. 72	Not successful	— —	Secy interments found	
6	VII.	Knook *a*.	i. 83	Successful ...	Burnt bones	Secy interments found ...	See B. XVI.
7	VIII.	Knook *b*.	i. 86	Successful ...	Skeletons (4) ...	None.	
8	IX.	Heytesbury, "*Bowl's Barrow*"	i. 87	Successful ...	Many skeletons (14)	Secy interments found ...	See B. VI.
—	X.	Tilshead (Old Ditch)	i. 90	Not successful	— —	Secy interments found ...	See B. XIII.
9	XI.	Tilshead, "*White Barrow*"	i. 91	Not successful	— —	None.	
—	XII.	Tilshead (Lodge)...	i. 91	Not successful	— —	Secy interments found ...	See B. X.
10	XIII.	Sherrington	i. 100	Not successful	— —	Secy interments found ...	Re-opened 1856, without success, by Rev. A. Fane and Dr. Thurnam.
11	XIV.	Corton	i. 102	Successful ...	Many skeletons (8)	Secy interments found	
12	XV.	Stockton...	i. 107	Successful ...	Skeletons	None.	
13	XVI.	Normanton, No. "173" ...	i. 206	Successful ...	Skeletons (4)	Secy interments found	

B.—By J. Thurnam, M.D. 1855–1867.

14	I.	Easton Hill	ii. Map, p. 3	Rifled before	Many skeletons ...	None	Wilts Arch. Mag. vi. 323.
15	II.	Willesford, "*Ell Barrow*" ...	i. 175	Rifled before	Skeletons	Secy interment found	
16	III.	Winterbourn Stoke	i. 121	Successful ...	One skeleton	Secy interments found ...	Mem. Anthrop. Soc. i. 140.
17	IV.	Tilshead (East)	i. 93	Successful ...	Many skeletons (8)..	None	Mem. Anthrop. Soc. i. 146.
18	V.	Tinhead	i. 88	Rifled before	Skeletons	None.	
—	VI.	Heytesbury, "*Bowl's Barrow*"	i. 87	— —	— —	— —	See A. IX. Re-opened for skulls.
19	VII.	Fyfield, "*Giant's Grave*" ...	i. 190	Successful ...	Skeletons (3)	None	Proc. Soc. Ant. N.S. iii. 170.
20	VIII.	Bishop's Cannings	—	Not successful	— —	None	Stukeley, Abury, p. 45?
21	IX.	Wilsford, No. "170"	i. 206	Not successful	— —	Important secy interments	
22	X.	Tilshead (Lodge)	i. 91	Successful ...	Skeletons (2)	Important secy interment	
23	XI.	Figheldean	i. 176	Successful ...	One skeleton	Important secy interment	
24	XII.	Netheravon	i. Map, p. 113	Rifled before	Skeletons disturbed	None.	
25	XIII.	Tilshead (Old Ditch)	i. 90	Successful ...	One skeleton and burnt bones	— —	See A. X.
26	XIV.	Stonehenge ("Cursus") ...	i. 158	Not successful	— —	Secondary interments	
27	XV.	Stonehenge, No. "165" ...	i. 206	Successful ...	Skeletons (3)	Secondary interments ...	See *Ancient Wilts*, i. 206.
—	XVI.	Knook *a*	i. 83	— —	— —	— —	See A. VII. Re-opened without further result.
28	XVII.	Norton Bavant	i. 67	Successful ...	Many skeletons (18)	None.	
29	XVIII.	Bratton	i. 55	Successful ?...	Burnt bones	— —	See A. II.
30	XIX.	Fittleton	i. Map, p. 178	Rifled before	Skeleton, N. end ...	None.	
31	XX.	Horton	ii. Map, p. 3	Rifled before	Skeletons, N. end ...	None.	
—	XXI.	Warminster	i. 66	— —	— —	— —	See A. IV. Re-opened and doubts removed.

eight bodies, lying on the floor, near a hole or "cist" scooped out of the chalk rock. To this exceptional case we will return.

Position of the Interments.—The situation of the interment was at or near the east end of the barrow in fifteen out of the twenty-two cases. In six other tumuli, of which the orientation is nearly north and south, the interment was near the south end in four, and near the north end in two. In one of the twenty-two barrows (No. 12) the position is not stated.

Excavated Holes or "Cists" in the Chalk.—In eight cases out of the twenty-two, round or oval holes scooped in the upper layer or surface of the chalk, varying from a foot or two to three feet in diameter, and from one to two feet in depth, which were called "cists" by Mr. Cunnington and Sir R. C. Hoare, were found near the human remains. In other cases such holes probably existed, though they were not reached by the excavations. In all but two instances, in one of which the human skeleton itself is said to have occupied the "cist," and in the other the skull of an ox and the horns of a red deer, these excavated holes, evidently intended as receptacles for something, were empty when uncovered; *i.e.* they contained nothing but the loose grey or black soil peculiar to the bottom of these barrows. Sir Richard Hoare observes of these little pits or holes, that they "denote some particular ceremony that was practised in these tumuli."[a] There may be some reason for conjecturing that they correspond with the cavities, not very dissimilar in size, which were excavated in the earth, and in which libations and the blood of victims were offered to the infernal deities by the ancient Greeks; as described at the end of the Tenth, and in the beginning of the Eleventh, Book of the Odyssey.[b] Or, they may have been formed for the reception of perishable food or drink, deposited in them at the time of the obsequies, and intended as a *viaticum* for the dead. They would thus take the place of the fictile vessels called food-vases and drinking-cups, which are found with unburnt bodies in the circular barrows.

Stratum of Black Earth.—The upper strata of the long barrows of Wiltshire consist chiefly of chalk rubble and flint nodules; but these grave-mounds differ from the circular barrows around them, in having at the base a stratum often

[a] *Ancient Wilts*, i. 92.

[b] Odyssey, x. 516; xi. 25—28, 35. The hole or pit, *βόθρος*, dug out by Ulysses with his sword, was not smaller than some found in our long barrows. Such holes are still made by barbarous tribes, both in India and Africa, to receive the blood of human victims (Campbell, *Wild Tribes of Khondistan*. 1863; Wilmot, *Despatches presented to House of Commons*, (*Dahomey*,) 1863). Further on we may see reason for admitting that the holes in the long barrows may have served for the same purpose.

two feet or more in thickness, in which the skeletons are found, of a black or grey-ash coloured, and often unctuous-looking, earth, formed probably by the decay of the turf and *humus* pared off from the site of the barrow, and from the space occupied by the lateral ditches on each side of it. This peculiar stratum was a source of much perplexity to Sir R. C. Hoare and his coadjutor; and two of the leading chemists of that day, Mr. Hatchett and Dr. Gibbes, were consulted as to its nature. Both agreed in denying that it was produced by the action of fire, to which some had referred it. Though very general, this stratum of black earth is not universal; and two of the most remarkable of the long barrows opened by myself, viz. that at Fyfield, called "The Giant's grave" (No. 19), and that at Norton Bavant (No. 28), presented no trace of it.

Remains of Funeral Feasts: Bones of Oxen.—Not far from the human remains, though at a somewhat higher level, but still for the most part in the stratum of black or grey earth, are often found the bones of oxen, those of the skull and feet being the portions of the skeleton most generally met with. Those I have found (in Nos. 22, 26, 27, and 28) are of the small short-horned species, the *Bos longifrons* or *Bos brachyceros*. In the long barrow of Tilshead Lodge (No. 22) there were two skulls,[a] one of which, that of a male, I have been able in great measure to restore. With the second less perfect skull were six or seven cervical vertebræ *in situ* and entire, excepting the *atlas* and *dentata*, which were each in two pieces, cleanly cleft as if by great violence, probably in the slaughter of the animal. In the same barrow, not far from the first skull, were the *metatarsus* and *phalanges*, no doubt of the same ox, all *in situ*. In another barrow (No. 26) were part of a skull and a great number of *metacarpi* and *metatarsi*, with every phalangal bone of the digits in place, and in several instances the carpal, tarsal, and sesamoid bones likewise. The bones found indicated not less than four or five animals, and there may have been others not reached by the excavations. Altogether, the appearances justify the conclusion that oxen were slaughtered at the time of the obsequies for the supply of the funeral feast, and that the heads and feet, not being used for food, were thrown on the yet incomplete barrow, as offerings, perhaps, to the *manes* or to other deities. The appearances of the foot-bones, as well as of those of the neck, clearly proved that the entire members, head and feet, had been cut off whilst held together by the tendons, ligaments,

[a] The less perfect skull and cervical vertebræ are in the Museum of Anatomy of Oxford, as are likewise specimens of *metatarsi* and *phalanges* from barrow No. 26. I have also presented *metatarsi*, or *metacarpi*, or both, to the British Museum, the Museum of the College of Surgeons, and to that of the University of Basle.

hoofs, and probably the skin. In the two other barrows referred to (Nos. 27 and 28) were found broken bones of the fleshy parts of this small ox, viz., portions of two *tibiæ* and of the *os innominatum*. The remains of oxen found by me in the long barrows were uniformly such as zoologists and comparative anatomists refer to the ancient small species, the *Bos longifrons* or *Bos brachyceros*.[a] In the remarkable tumulus called "Bowl's Barrow" (No. 8) Mr. Cunnington found the skulls of no fewer than seven or eight oxen, but he does not describe their size or other characteristics. Similar remains were found by my predecessors in two other instances (Nos. 6, 10); and Sir Richard Hoare says of the head and horn-cores of the former, that "a butcher pronounced them larger than he ever saw of that animal" (the ox).[b] It might perhaps be conjectured from this inadequate evidence that this was the skull of an altogether different species—*Bos Urus* or *Bos primigenius*, but this is by no means proved.

Remains of other Animals.—It is very common to find in long barrows, in the same situation as that which yields the remains of *Bos longifrons*, large antlers and bones of the red deer, trophies probably of the chase, buried, it may have been, from motives similar to those hinted at above in regard to the head and hoofs of the oxen.[c] Tusks and bones of swine, perhaps the wild boar, and bones of birds of considerable size, have also been discovered. Mr. Cunnington speaks of the skeleton of a large bird, but does not identify the species.[d] In one of the barrows opened by myself (No. 27), in which bones of *Bos longifrons* and of *Cervus elaphus* were also found, was the entire skeleton of a bird, which, on comparison of the mandible with that of specimens in the Oxford Museum and in the Museum of the College of Surgeons, was indubitably that of a somewhat large goose. As the skeleton was complete it must have been interred entire, and its flesh could hardly have been eaten. So far as this single case goes, we seem to have in it a confirmation of the statement of Cæsar, that the Britons did not regard it as lawful to eat this bird, though, like the hare and the fowl, they bred it for amusement and pleasure.[e]

[a] The latest authors who treat of this species, and of *Bos Urus*, are Professor Rutimeyer, *Archiv für Anthropologie*, i.; and W. Boyd Dawkins, F.R.S. *Proc. Geol. Soc.* March 21, 1866, pp. 391-451; Feb. 20, 1867, pp. 176-184.

[b] *Ancient Wilts*, i. 83. This skull, and the horns of deer found with it, were in a much more superficial position than usual, and just below the summit of the barrow.

[c] The skeleton of a horse is stated to have been found in the skirt of a long barrow. (*Ancient Wilts*, i. 73.) There is some doubt, however, whether this was a true long barrow.

[d] *Archæologia*, xv. 345. Comp. Hoare, *Ancient Wilts*, i. 72, 83, 90, 91.

[e] *Bell. Gall.* v. 12. This statement of Cæsar's is somewhat vague and general; and in particular it

Mode of Burial.—The human remains belonging to the primary interments in the long barrows may be classed under two heads, according as they are the skeletons of one or at the most two bodies distinctly and separately interred, or as they are those of many bodies promiscuously piled together. As a rule, the former belong to the mounds of less, the latter to those of greater, elevation. In that of Winterbourne Stoke (No. 16) the single skeleton lay in the contracted posture on the right side, much in the same way as skeletons are found in the circular barrows of the bronze period. In that near Tilshead Lodge (No. 22) there were two skeletons lying not more than a foot apart. The space occupied by each was so very small, that either very unusual means had been resorted to for doubling up the body, or the flesh had been suffered to decay before burial. The bones, however, were observed to be *in situ*, joint to joint, so that the ligaments at least had not separated when the bodies were deposited in their final resting-place. Both skeletons lay with the head to the north, and on the right side. In the Figheldean long barrow (No. 23) the bones of a single skeleton formed a small pile, very little to the east of the centre of the mound,[a] and in this instance they appeared to have been disarticulated by the decay of the ligaments before their final interment; the bones in many instances not retaining their proper relative position, the head of one tibia being in juxta-position with the malleolus of the other, and *vice versa*. Much more usually, however, the human remains in the long barrows comprise numerous skeletons, which are described by Sir R. C. Hoare as "strangely huddled," or "thrown promiscuously together," or as "lying in a confused and irregular manner." The bones found by me in Tilshead East Long-barrow (No. 17) comprised the remains of eight skeletons singularly cemented together, within a space of less than four feet in diameter, and about a foot and a half in depth. So much were they mingled and so closely packed, that it was scarcely possible to regard this as the original place of burial; and it is almost certain they had experienced a prior interment, and had been removed to the spot where they were found after the decay of the soft parts and the separation of the bones. The same seemed to have been the case in No. 27. In the long barrow of Norton Bavant (No. 28) the pile of bones consisted of the remains of at least eighteen skeletons, which were comprised

must be regretted that he does not say whether he is speaking of the maritime Britons or of the less civilized inhabitants of the interior, or of both. On this subject, see papers in the *Trans. of the Ethnol. Soc.* N.S. v. 162, 210.

[a] There was great trouble in finding the interment in this mound, it being so exceptionally remote from the eastern end.

within an area of about 8 by 3 feet, and about 18 inches in depth. The idea conveyed by the exploration of this deposit was that of a prior interment. There was great commingling of the osseous remains; and it was noticed that many of the bones of the limbs were absent, judging as to their proper number from that of the skulls.

Cleft Skulls:—Evidence as to Human Sacrifices.—In a large proportion of the long barrows which I have opened, many of the skulls exhumed have been found to be cleft, apparently by a blunt weapon, such as a club or stone axe.[a] A cleft cranium from a Wiltshire long barrow[b] had been noticed by Mr. Cunnington in 1801, but no inference was drawn from it. Among the heaps of human remains I have sometimes found one skull unmutilated, whilst all the others show marks of cleavage. From a minute examination of the fractures, I think it evident that the violence was inflicted prior to burial, and in all probability during life. Such injuries might, no doubt, occasionally occur as an accident of war; but it is scarcely possible they should have thus occurred with a frequency so great as the careful examination of these remains discloses.[c] I hence conclude that the skeletons with cleft skulls are those of human victims immolated on the occasion of the burial of a chief. Everywhere such human sacrifices, among barbarous and half-civilised peoples, have been and still are common; and notwithstanding the scruples of some modern writers, desirous of maintaining an exceptional position for humanity in the case of our own remote ancestors, there can be no difficulty in admitting the same practice in Britain. The Gauls were more civilized than the Britons of the times of Cæsar and Mela; but by both these writers we are expressly informed that they had, until quite recently, been in the habit of sacrificing human victims, whether self-devoted or not, at their funerals.[d]

[a] See the description of the skull of a Charca, from Bolivia, in which death had resulted from "blows upon the head made by a blunt instrument of stone, which have fractured the cranium in different places." Davis, *Thesaurus Craniorum*, No. 1425, p. 248. For Feejees and Tahitians, see pp. 314, 318.

[b] Bowl's Barrow, No. 8; see *Ancient Wilts*, i. 87. Comp. *Archæologia*, xxxviii. 419; *Memoirs Anthrop. Soc.* i. 472; *Arch. Journ.* xxii. 106, 107. The connection of cleft skulls with human sacrifices was first maintained by the writer, in the description of the Chambered Long Barrow at West Kennet, in the 38th vol. of the *Archæologia*, as quoted above.

[c] Reference may be made to the stone axes, one of which is figured in the *Proceedings of the Society of Antiquaries* (2 S. i. 103), as to which the Hon. Robert Marsham tells us "the Gaveoes (Indians of Brazil) do not use the axes in actual battle, but after the fighting is over, deliberately hack their prisoners with them." As has been well observed by Mr. Greenwell, the ordinary "accidents of war do not account for the scattered state in which the broken bones are found in the long barrows."

[d] *Bell. Gall.* vi. 19; Mela, iii. 2. Among modern English investigators, the late Mr. Bateman and Sir John Lubbock both freely admit the existence of such sacrifices among our British ancestors. In all times

In the time of these writers the burials were usually attended by the cremation of the body, so that the remains of the victims might not be distinguishable from those of the chief at whose obsequies they had perished. It would be different when the body was interred unburnt; that of the chief would be as a rule unmutilated, whilst marks of violence might be expected to be met with in the remains of the slaves and retainers slaughtered in his honour. And in accordance with this conclusion it is not unusual, as already stated, to find one of the central skeletons with the skull entire, whilst in all the others it is more or less extensively cleft. The solitary skeleton which formed the primary interment in the Winterbourne Stoke long barrow (No. 16) was entire and unmutilated, and the absence of associated skeletons with cleft skulls renders it probable that the usual funeral rites were in this instance never completed. It is doubtful, however, whether this holds good in all cases in which single skeletons are found. In the Tilshead Lodge long-barrow (No. 22), in which were two skeletons, the skull of one was cleft whilst that of the other was intact.

Possible Anthropophagism.—Pliny is referring to the human sacrifices of Gaul and Britain, when he observes that the transition is very easy from sacrificing human beings to eating them.[a] That under certain circumstances anthropophagism was practised in the British islands rests, we think, on the testimony of too many authors to be doubted;[b] and, the older the date of any sepulchral monuments, the more likely are we to find in them traces of this practice. Altogether I see no difficulty in acceding to the conclusion of Mr. Greenwell, that in the disjointed, cleft, and broken condition of the human bones in many of the long

the abolition of human sacrifices implies a strong government and a vigorous administration. In Ancient Italy their suppression was attributed to Hercules. At Gades, it was effected by Julius; and in Gaul and Britain, by the Cæsars who succeeded him. In India, the British Government has only of late years effected their abolition (*Suttees* and *Meriahs*), if indeed it have every where done so.

[a] Pliny, vii. § 2. "Nuperrime hominem immolari gentium earum more solitum: quod paulum a mandendo abest." He is speaking of Britain when he connects the eating of human flesh with a supposed benefit to health; lib. xxx. § 4; comp. xxviii. § 2. "In quibus hominem occidere religiosissimum erat, *mandi vero etiam saluberrimum.*" Cannibalism, as practised by modern savages, seems often to be caused by the desire of embodying the physical and mental qualities of the dead. In olden times it seems to have been the same. Thus, in the Norse Saga, Sigurd is represented as giving his wife a portion of the roasted heart of Fafnir to eat; a dish which, it is said, inspired her with ferocity. Like is still done, and for like purpose, by the Chinese. Tylor, *Early Hist. Mankind*, 131. Waitz (*Anthropology*, i. 161) appears to reverse the true order of connection when he says, "Where men eat each other, the gods are generally blood-thirsty, and receive their share." Well might Lucretius say of pagan systems of religion, "Tantum religio potuit suadere malorum."

[b] Diodorus, v. 32; Strabo, iv. 5, § 4; Hieron. *Adv. Jovin.* lib. ii.

barrows, and especially in those examined by him at Scamridge near Ebberston, and near Rudston, Yorkshire, we have indications of funeral "feasts, where slaves, captives, and others were slain and eaten."[a]

The idea of cannibalism is still more repugnant to modern and Christian civilization than that of simple human sacrifice; and numerous amiable attempts have been made to relieve our ancestors from the charge. All antiquity, however, is full of allusions to the practice; and down to the present day, in all quarters of the globe excepting only Europe, there are countries in which it maintains more or less sway. Some writers, who admit the practice of human sacrifice in the British islands, think that, "like those of the Peruvians, and unlike those of the Mexicans, the Britons stopped short of devouring the flesh of the victims."[b] This was no doubt true of South Britain at the time it became known to the Romans, but may not have been so at the far earlier epoch to which our long barrows are to be referred. As the able writer from whose paper on this subject I have just quoted justly observes, "It is highly probable that all the races of man in their tedious march towards civilization must have passed through the stage of cannibalism;" and, as Mr. Crawfurd adds, in reference to our own quarter of the globe, "It was in northern and western Europe that cannibalism probably, and human sacrifices certainly, lingered the longest."[c] That in Gaul and the British isles anthropophagism did once prevail rests on positive testimony, which might have been still stronger but for the reason that the practice had become extinct in the more civilized parts of Britain before the time of Julius Cæsar. Diodorus, however, expressly states that even in his day "it was reported that some of the more savage of the Gauls living in the north near Scythia eat human flesh, as also the Britons who inhabit Ireland." Seventy years after Cæsar, though still early in the first century of our era, Strabo repeats the statement, as to the authority for which he did not vouch, that "the inhabitants of Ireland, who were more savage and barbarous than those of Britain, fed on human flesh, and deemed it com-

[a] *Archæological Journal*, 1865, xxii. 107. Mr. Greenwell adds, "The flesh must have been removed from the bones before they were buried; or they would not have been found displaced in the manner described." On this subject a paper by M. Garrigou, *L'Anthropophagie chez les Peuples des âges du Renne et de la Pierre polie, dans les Cavernes de la France*, may be consulted. *Bull. de la Soc. d'Anthrop.* 2 Ser. ii. 326.

[b] See a paper by the late John Crawfurd, Esq. F.R.S. *Cannibalism in relation to Ethnology, Trans. Ethnol. Soc.* N.S. iv. 108. See, in the same volume, an excellent paper by the Rev. F. W. Farrar, F.R.S., in which the anthropophagism of the ancient Britons is expressly asserted, p. 117.

[c] *Trans. Ethnol. Soc.* N.S. iv. p. 124.

mendable to devour their deceased fathers." That some of the Irish were really anthropophagous receives a tardy confirmation from the well-known narrative of St. Jerome, who at the beginning of the fifth century minutely describes the repulsive cannibalism of the Attacots, who in all probability were a tribe of Irish origin, though settled in Britain to the north of the great barrier of Hadrian, if not of that of Antonine likewise.[a] The existence of anthropophagism in Britain is the more probable from the glimpses of the practice which we obtain in Homer, in his stories of the Cyclopes and the Læstrygones; and also in Herodotus, whose anthropophagi,[b] the Scythian anthropophagi of Pliny,[c] were clearly Europeans. The custom attributed to the Irish by Strabo of eating their fathers was paralleled in the old world by that of three Asiatic peoples, also described by Herodotus, viz. the Massagetæ,[d] the Issedones,[e] and the Padean Indians.[f] The mode of procedure seems to have been very similar in the case of all these people, but is more fully described as practised by the Massagetæ, amongst whom the aged were sacrificed by their relatives together with various kinds of cattle, and a feast made on the boiled flesh. It was counted a great misfortune if the aged were carried off by disease, as in that case the dead were not eaten.

A similar practice, that of eating their parents, was ascribed to the Battas of Sumatra by Sir Stamford Raffles, and we may question whether the doubts which have been expressed in regard to it are well founded.[g] How little in such cases we can reason as to what is probable from modern feelings may be seen in the case of the Carian queen Artemisia—the Victoria of her time—who in the middle of the fourth century B.C., and participating to the full in the Greek civilization of the period, mingled with "a passionate prodigality" the ashes of her husband in her daily drink!

That traces of a kind of Suttee—*gynethusia* as it has been termed—may be looked for in the earlier tombs of the ancient Britons is probable, not merely from what Cæsar tells us of the immolation of slaves and dependants, but still more so

[a] Hieron. adv. Jovin. lib. ii. For the Attacots, see the author's "Historical Ethnology of Britain," being chap. v. of *Crania Britannica*, pp. 152, 153.

[b] Herod. iv. 106. Comp. *Quarterly Review*, Oct. 1868, p. 418.

[c] Pliny, iv. 26; vi. 20; vii. 2. [d] Herod. i. 216. [e] Ibid. iv. 26.

[f] Ibid. iii. 99. Strabo tells us (xi. 12, § 8) that the Derbices (a people of Scythian origin) also killed and ate the bodies of those who exceeded 70 years of age, and that the nearest relatives ate them. What the same writer says (iv. 5, § 4) as to the Kelts and Iberians eating human flesh during the severities of a siege, is not conclusive, though the comparison with a passage in Cæsar (B. G. vii. 77) makes it probable that it was by no means in the last extremity that the old people were killed and eaten by the Gauls when besieged by the Cimbri and Teutones.

[g] As to this worst kind of cannibalism, see Bickmore's *East Indian Archipelago*, pp. 111, 446.

from his statement that, if the circumstances of the death of a chief were suspicious, the wives were put to severe torture and killed by fire.[a] This passage is particularly interesting when compared with one in Strabo which refers to a tribe of Indians called Cathæi, in which the origin of the Indian custom of Suttee is actually traced to the jealousy, not always ill-founded, of the men.[b]

Archaic methods of disposal of the Dead.—Some may think that certain peculiarities in the method of disposing of the remains of the dead observed among rude peoples of both ancient and modern times, will explain the peculiar condition of the bones in many of the long barrows, without the necessity for calling in the repulsive customs of human sacrifice and cannibalism. Though not sharing in this opinion, it is necessary to call attention to these customs, which may seem to illustrate some of the appearances met with in the most ancient tumuli.

The crouched position of the skeleton, with the knees drawn up more or less closely to the breast, is not confined to the long barrows, or to tombs of the stone age; but is also observed, almost if not quite to the exclusion of the extended posture, in the circular barrows of the bronze age. It is a very singular though well-known circumstance, that this contracted or crouched position of the remains is by no means peculiar to ancient British tombs, but is found to have been and still to be very generally resorted to by primitive and barbarous peoples in both hemispheres and in all the quarters of the globe. The earliest notice of it seems to be in Herodotus, who tells us that the Nasamones of Lybia buried their dead in a sitting posture, watching when one is about to expire, that they may set him up, that he may not die supine.[c] Diodorus, writing of the burials of the Troglodytes near the Red Sea, tells us that they tied the neck and heels of the corpse together with twigs of a thorn-bush, and, having carried it to the top of a hill, they pelted it amid great laughter with stones, until it was covered with a cairn, on which they placed a goat's horn.[d] Of obsequies like these, well might Montfaucon exclaim, "These are strange funerals!" But even they give place to those of the people of the Balearic Isles, who, as we are told by the same historian, pounded or mashed the body with their wooden clubs, and so forcing it into some sort of trough or receptacle raised over it a great pile of stones.[e]

[a] Bell. Gall. vi. 19. Capital punishment by burning was common amongst the Gauls. *Ibid.* i. 4, 53.

[b] Strabo, xv. 1, § 30.

[c] Herod. iv. 190.

[d] Diod. Sic. iii. 2. Comp. Strabo, xvi. 4, § 18. These Troglodytes were those called Megabarei.

[e] Diod. Sic. v. 18. In the three cases named in the text we have, perhaps, only different degrees of the same custom; the crouched, doubled-up, and neck-and-heels positions, were in all aimed at, but most completely attained by the Baleares.

Provisional Burial.—In reference to the subject before us there are other customs as to the disposal of the dead not yet exploded, which there is reason to believe obtained among many ancient peoples, and which must not be overlooked. Provisional sepulture is the practice of many North American tribes, who do not inter the dead in their final resting-place at once, but bury them in or near their wigwams, and at the time of their first remove disinter and carry the bones with them for interment in the cemetery of the tribe, it may be at a great distance. In the Society Islands the dead were not buried immediately, but were placed on a platform railed in with bamboo. When the body had entirely decayed, the bones were collected, carefully cleaned and buried, according to the rank of the deceased, either within or without a "morai," a pyramidal stone structure, not very unlike a gigantic long barrow.[a] But we have not to go so far as the islands of the South Sea, or the North American continent, for examples of this strange practice, or of one at least closely allied to it. No further off than Brittany the bones of the dead, to which a sort of religious reverence is paid, are disinterred when they are thought to be divested of the flesh, and are removed to a bone-house; whilst the skulls are placed in boxes, protected by gratings, and inscribed with the names of the deceased. These boxes are arranged in rows on the walls of the churchyards.[b] A similar practice I myself have witnessed in the Roman Catholic cantons of Switzerland, where an ossuary or bone-house is found in many, perhaps most, of the churchyards. Here are immense piles of bones, with hundreds of skulls on shelves, many of them labelled with the names of the dead and date of birth and death. At Rapperschwyl, on the lake of Zurich, some of these skulls were ranged on a rude altar, on which stood a crucifix and lighted candles. In all these cases it is obvious that when the body has once been disinterred the bones must necessarily become disarranged, mixed, and perhaps broken, in such a manner as may perhaps explain some of the appearances presented by the bones exhumed from the long

[a] Lubbock, *Pre-Historic Times*, 1865, p. 384. In the same work (p. 431) the strange process of making skeletons of the dead among the Patagonian Indians, is described, after Falkner. See, however, Prof. Nilsson's argument against such a practice in the case of the chambered long barrows of the North, as maintained by M. Bruzelius, M. Boye, and Prof. Hildebrand. *Primitive Inhabitants of Scandinavia*, by Sir J. Lubbock, pp. 160—168.

[b] Weld, *Vacation in Brittany*, 1856, p. 119, and *passim*. Miss B. R. Parkes, in Gent. Mag. Oct. 1867, N.S., vol. iv. p. 485. The same practice also obtains in certain parts of sub-alpine Italy. (Rev. S. W. King, *Pennine Alps*, 1858, p. 471). Any collecting of the bones of the dead was forbidden by the Laws of the Twelve Tables. (Cic. *De Leg.* ii. 24.)

barrows. It is indeed highly probable that, during the time the large and honorary grave-mound was in process of formation, the bodies of the dead and of those slaughtered in their honour were deposited in some temporary grave, and subsequently disinterred for final interment in the complete, or nearly complete, long barrow.[a] I am, however, satisfied, by repeated and minute examinations of the bones, that the very peculiar appearances which they present cannot be entirely explained in this way; but that they are due, as already stated, to the manner in which those who were sacrificed in the course of the funeral ceremonies were slaughtered, and who seem to have been literally "brained" by the blows of a club or stone axe.

Cremation in Long Barrows very rare and exceptional.—When I commenced my researches in the long barrows of Wiltshire there was only a single instance recorded in which the remains of the dead found in them had been burnt. This solitary exception to the general law of simple inhumation was that of the Knook Long Barrow (No. 6), in which, in the year 1801, in the usual situation, and instead of the usual pile of skeletons, Mr. Cunnington found "a large quantity of burnt bones."[b] Perhaps the largest long barrow of Wiltshire is that one, of which the peculiar relations to the "Old Ditch" at Tilshead have already been referred to, and which was opened by Mr. Cunnington in 1802, but without finding, as appeared to me, the primary interment.[c] In September 1865 I made a large excavation at the east end, at its very broadest and highest part, and was rewarded by reaching the true primary interment, though at first under a form for which I was not prepared. At a depth of more than ten feet, under the accustomed stratum of black earth, was a pile of large flint-stones, beneath which, and on a sort of pavement of similar flints, many of them of a red or blue colour, and very rotten or brittle in texture, was a large pile of burnt human bones, being those apparently of one full-grown adult individual. It was observed that the fragments of bone were much larger than those so common in the circular barrows, and that they were far from being so completely incinerated. It was

[a] I am not aware that it has been suggested that slaves were sacrificed to any great extent during our round-barrow or bronze period, which was also that in which cremation was principally practised. This, however, is the view which seems to be objected to by the Rev. W. C. Lukis. (*Wilts. Arch. Mag.* 1866, x. 98.) Where we have reason to believe that the custom of immolating dependents did obtain, as during the long-barrow and stone period, there, it will be seen, is no difficulty in showing "what was done with the victims all the while that the mound was forming."

[b] *Archæologia*, xv. 345; Hoare, *Ancient Wilts*, i. 83.

[c] The interment found by Cunnington at the extreme west end, if not secondary, may have been a subsidiary primary interment.

almost sunset, and we were on the point of abandoning the search for entire skeletons, when portions of a small female skeleton were seen on the same level, but about two feet to the north-west of the burnt bones, and, like them, covered by very large flint nodules, which formed, indeed, a common pile. The skeleton was very closely doubled up or crouched, and the head was directed towards the north, inclining to the right side. All the bones were slender and diminutive, the femur measuring 16, and the tibia 12·75, inches only; indicating a stature of scarcely more than 4 feet 10 inches. The skull presents indisputable marks of having been violently cleft before burial, and no doubt during life. When found it was in many fragments, several of which must have been deposited whilst still connected by membranes, ligaments, and integuments. The space around was extensively searched for other skeletons, but without result. The only article found with the skeleton was a very roughly chipped flint, possibly a rude hatchet, measuring 2·25 inches long, 1·75 inch broad, and about half an inch thick. In this instance the skeleton appears clearly to have been that of a slaughtered female victim, and the burnt bones those probably of the chief in whose honour the barrow was erected. The case seems to be one of suttee; only the wife was not immolated by fire, as was the Indian method, and likewise that amongst the Gauls in the time of Cæsar.

This discovery in Tilshead Old Ditch long barrow induced me to re-excavate that at Knook, in which, as I have just stated, a deposit of burnt bones was found by Cunnington early in the century, in order to ascertain whether in that likewise there might not be an unburnt skeleton which had been overlooked. This was done in May 1866, when in digging at the north-east end of the barrow we came to traces of the burnt bones and many scattered brittle flints, some of a red and others of a blackish-grey colour, as if scorched by heat. Though no pains were spared in clearing out the base of the barrow, no trace whatever was met with of any unburnt skeleton or skeletons.

Many excavations had at different times been made in the long barrow in the centre of the British camp or earthwork known as "Bratton Castle," but without leading to the discovery of the primary interment.[a] In August 1866 our working party made two large openings at the extreme east end, and in the more westerly of the two, on the natural level, at a depth of eight feet and a half, and only one or two feet from the point where Mr. Cunnington's diggings appeared to have left off, was a heap of imperfectly burnt, or rather charred, human bones, as many

[a] Hoare, *Ancient Wilts*, i. 55; Camden, by Gough, i. 146.

perhaps as would be left by the incineration of one or two adult bodies. Careful search was made for an entire unburnt skeleton or skeletons, but without success. We have thus three cases out of thirty-one long barrows in which the burial was attended by the burning of the dead. The cremation however seems to have been of an imperfect and defective sort, quite different from that of the round-barrow period; when, moreover, instead of the burning having been practised at the most in a tithe of the instances,[a] it was decidedly the more usual mode. According to my enumeration of the circular barrows of Wiltshire, the exploration of which is recorded in the "Ancient Wiltshire" of Sir R. C. Hoare, and which I reckon as three hundred and fifty-four in number, cremation had been practised in not fewer than two hundred and seventy-two instances, or in the proportion of rather more than three to one.

Associated Manufactured Objects. Flint Implements.—As to the objects found with the human remains in the simple long barrows, a great infrequency of all such is in the first place to be noticed. It is, however, of the greatest importance to insist on the fact, that in no case whatever has any object of metal been found in them with the primary interment. The rarity of objects of flint and other stone, and of those of bone, as well as pottery, is also very remarkable; and leads to the inference that those which have been met with have seldom been deposited intentionally, or as a necessary part of the funeral rites. It may however be observed, as I have elsewhere done,[b] that "in consequence of the abundance of flint flakes on the surface of the chalk in Wiltshire, the presence of the simpler flint objects in the barrows was sometimes overlooked in the excavations of Sir R. C. Hoare and Mr. Cunnington. However this may be, it is certain that no flint implements or weapons[c] are mentioned as having been found in the long barrows opened for the most part by the latter gentleman."

To enumerate the flint objects found by myself; one of these, discovered with

[a] I am here speaking, as generally in this paper, entirely of Wiltshire and the south-west of England. Mr. Greenwell's researches in two long barrows, one in the North Riding and the other in the East Riding of Yorkshire, and the appearances disclosed on the levelling, by the occupiers, of one or two others, would seem to show that in this part of the North of England "cremation was the rule of the long barrows, but cremation after a singular and imperfect fashion."

[b] *Proc. Soc. Antiq.* 2 S. 1865, iii. 169; *Wilts Arch. Mag.* 1867, vol. xi. p. 47. Sir John Lubbock has made the same observation: "So far as stone implements are concerned, I must confess that Sir R. C. Hoare appears to have overlooked the ruder instruments and weapons."

[c] A hard violet-coloured stone, polished, with the edge broken off, is however named as having been found in one of the long-barrows (No. 5), opened by Cunnington. *Ancient Wilts*, i. 73.

the skeleton in the long barrow at Tilshead Old Ditch, has already been referred to. In the Winterbourn Stoke Long Barrow (No. 16), close to the right arm of the single skeleton which formed the primary interment, was a naturally bludgeon-shaped flint about eight inches long, and well adapted for being grasped in the hand. From one end numerous flakes had been knocked off, and it had evidently constituted an object of considerable importance to its owner.[a]



Fig. 2. Flint with Primary Interment. Winterbourn Stoke Long Barrow.

In the long barrow of Norton Bavant (No. 28), in which we found the remains of as many as eighteen skeletons, there was a curious globular ball or nodule of flint, much battered, and weighing three pounds and three quarters. It lay close to one of the skulls, and had obviously been appropriated to some special purpose. It was possibly the instrument by which so many of the skulls had been fractured. The more interesting object of flint, however, is a delicate and beautifully-chipped leaf-shaped arrow-head obtained from the long barrow on Fyfield Hill, called the "Giant's Grave," and which was found close to one of the skulls.[b]



Fig. 3. From Fyfield Long Barrow.

As similar leaf-shaped flint arrow-heads, chipped to a great tenuity, have been found in two chambered long barrows, one in Wiltshire (Walker Hill) and one in Gloucestershire at Rodmarton, and as no barbed flint arrow-heads have so been found, I have ventured to designate this more primitive though very delicate form *the long-barrow type of flint arrow-head*, it being the only description as yet found in them.

Pottery.—Sir R. C. Hoare and Mr. Cunnington record the discovery of fragments of rude British pottery in the soil of which the long barrows are composed; but neither of them appears in any instance to have found earthen vases of any sort, or even fragments of such, with the primary interments. In the long barrow at Tinhead (No. 18), which had evidently been rifled at some unknown period, we found, in 1864, traces of human remains in the usual situation at the east end;

[a] *Memoirs Anthropol. Soc.* 1865, i. 142; to the courtesy of the Council of which Society we are indebted for the use of the wood-block in the text.

[b] See *Proc. Soc. Antiq.* 2 S. iii. 170, where this arrowhead is described and figured, but not satisfactorily.

and near them a fragment or two of rude black pottery of a peculiar character, thin, smooth on the outside, and having the clay of which it is formed mixed with pounded shells, apparently fossil shells of the district. I was at once impressed with the similarity of these fictile fragments to others found in the previous year in a stone chamber in the long barrow at Rodmarton, and I carefully preserved portions of both for future comparison. In 1866, in removing the pile of skeletons from the long barrow of Norton Bavant (No. 28), imbedded among the human skeletons we discovered the greater part of a thin curious vase of a wide-mouthed semi-globular form, and which was capable of being partially restored. There

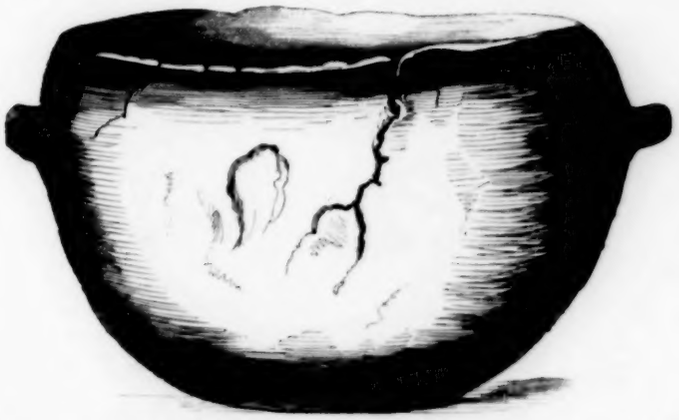


Fig. 4. Fictile Vessel, with Primary Interment. Norton Bavant Long Barrow. (Scale $\frac{1}{3}$rds linear.)

are two ear-shaped handles projecting from below the rim, and the vessel when complete would have held perhaps two pints. The paste is lighter in colour than that of the fragments from Tinhead and Rodmarton, but, like them, is studded with white fragments of shells, among which I am assured those of a small fossil oyster from the tertiary clay beds of Wiltshire and Hampshire are to be distinguished. In these several instances, there is not the slightest trace of ornamentation, either by the pressure of cords or thongs or by any other process; in this respect the contrast being great with most of the pottery from the round barrows.

Secondary Interments.—The secondary interments not unfrequently met with in the upper strata, or near the summits of long barrows, are of great importance in forming an estimate of the probable relative date of these grave-mounds. In three instances at least (Nos. 5, 8, 10), Mr. Cunnington and Sir R. C. Hoare found skeletons, which, from their extended position and the character of the iron weapons accompanying them, were evidently Anglo-Saxon. In the long barrow

near Tilshead Lodge (No. 22) we uncovered within a foot of the summit a skeleton stretched at length from east to west, with the iron umbo and other mountings of a shield on the breast, and the remains of a small brass-bound bucket of wood at the head; both being objects as to the Anglo-Saxon character of which there can be no doubt.[a]

But, if secondary interments of the Anglo-Saxon period were alone met with, the long barrows might belong to a much more recent period than that for which



Fig. 5. Drinking Cup, with Secondary Interment. Wilsford Long Barrow. (Scale $\frac{1}{2}$ linear.)

I have throughout contended, and be of the late ancient British, or even of the Romano-British, period. It is certain, however, that some of the secondary inter-

[a] In *Ell Barrow* (No. 15), likewise, I found a large male skeleton stretched at length, a foot or two below the turf, which was probably Anglo-Saxon. The long cleft in the skull (No. 148 of my collection) presents quite a different appearance from that observed in the skulls from the primary interments in the long barrows. It had probably been inflicted by a sword, in battle or other fight. Ecker (*Cran. Germ.* 37, Taf. xviii. 1, 2, 3) describes an ancient skull from Oberflacht, in which there is a distinct axe or sword-cut.

ments found in them are pre-Roman, and of the ancient British bronze age. In two if not three instances[a] secondary interments of burnt bones, in one case inclosed in a rude cinerary urn, were discovered by my predecessors, in their explorations, near the tops of long barrows.[b] In the excavations conducted by myself, no secondary interments after cremation have occurred, but in no fewer than five instances (Nos. 16, 21, 23, 26, 27) I have met with skeletons near the surface, the contracted or crouched position of which make it probable that they

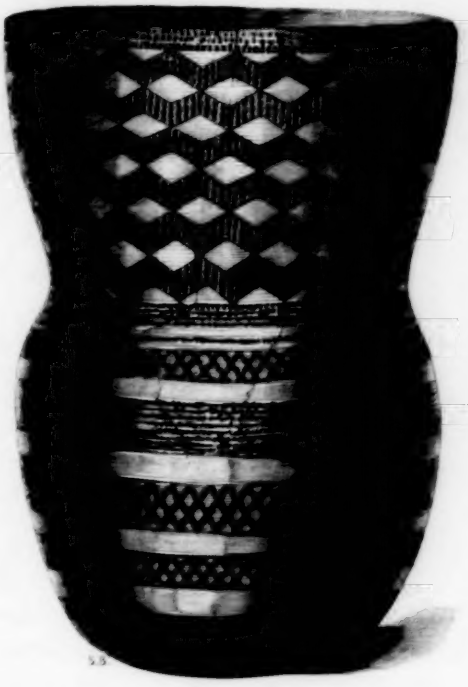


Fig. 6. Drinking Cup, with secondary Interment. Figheldean Long Barrow (scale ½ linear).

were of the ancient British and not of the Anglo-Saxon period. In the three first the evidence as to this was conclusive, from their being associated with pottery indisputably of the period referred to. The first (No. 16), from the Winterbourn Stoke long barrow, was a "food-vase," which, with a flint knife, had been deposited with a group of bodies, of a man, a woman, and several children, the very brachycephalic skull of the first of which has been engraved

[a] Nos. 11, 25; comp. No. 3.

[b] In no case whatever has urn-burial after cremation been found at the base of, or as the primary interment in, a long barrow.

and fully described in the Memoirs of the Anthropological Society.[a] In the two other barrows (No. 21 Wilsford, and No. 23 Figheldean) the vases found close to the skulls consisted (*see* woodcuts on the preceding pages) of beautiful "drinking-cups" of the latest highly decorated type, such as are usually only met with in the most modern circular British tumuli, and have in no case been found with the primary interments of long barrows. In these three instances, the associated skulls were of brachycephalous type, with a breadth-index of ·87, ·84, and ·78 respectively, being the same as that proper to the circular barrows of Wiltshire.

Type of the Skulls from the Long Barrows.—It is very much to be regretted that neither Sir Richard Hoare nor Mr. Cunnington preserved any of the human remains, and especially the skulls, found by them in the long barrows. The first skull obtained from an unchambered long barrow, and which was also the first to be described, was from that at Winterbourn Stoke in 1863.[b] Since that time I have succeeded in procuring many more such crania, and there are now twenty-seven in my collection (twenty-one supposed to be those of men, and six of women), which are capable of being measured. In the following Table I show the numbers

Skulls from Unchambered Long Barrows in South Wilts.

B.		No. of Skulls.	Breadth-Index. Range.	Mean.
III.	Winterbourne Stoke	1	·75	·75
IV.	Tilshead (East)	5	·68–·74	·71[5]
VI.	Bowl's Barrow	4	·65–·70	·67
VII.	Fyfield	1	·69	·69
X.	Tilshead (Lodge)	2	·66–·68	·67
XI.	Figheldean	1	·67	·67
XII.	Netheravon	1	·69	·69
XIII.	Tilshead (Old Ditch)	1	·68	·68
XV.	Stonehenge (165)	2	·70[5]–·71	·71
XVII.	Norton Bavant	9	·63–·73	·68[5]
	Total and averages	27	·63–·75	·69

obtained from the several long barrows, and also the relation of the breadth to the length of the skull, the latter being taken as 1·00. This, which by craniologists is termed the *cephalic index* or *breadth index*, ranges between ·63 and ·75, and has an average of no more than ·69. The skulls are in fact remarkably long and narrow, or such as are designated *dolichocephalic*, *stenocephalic*, and *kumbecephalic* by modern craniologists. In Europe, at the present day, there is no people with skulls so long and so narrow; and we have to search for cranial

[a] Vol. i. 1865, p. 145, plate ii.

[b] *Memoirs Anthropol. Society of London*, 1864, i. 144, plate i.

proportions similar to those of the old long-barrow folk far away in Africa, India, Australia, or the Melanesian Islands.

The contrast in form between the long skulls from the long barrows and the short or round skulls, which, to say the least, prevail in our Wiltshire circular barrows, is most interesting and remarkable, and suggests an essential distinction of race in the peoples by whom the two forms of tumuli were respectively constructed. The subject, however, is too extensive to be treated of satisfactorily in this place, and is indeed the less needful, as having been fully discussed in memoirs presented to another Society in 1864 and in the present year (1867).[a]

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2. *Chambered Long Barrows.*

Researches of Hoare.—The Chambered Long Barrows of Wiltshire and the adjoining counties were described by Sir R. C. Hoare under the vague name of "Stone Barrows;" a designation which might more properly apply to mere cairns, as distinguished from barrows of earth. Writing of the chambered tumulus at Stoney Littleton near Wellow in Somersetshire, he says, "It varies from the simple Long Barrows, not in its external, but in its internal, mode of construction. None of this kind occurred to me in my researches in South Wiltshire; for the material of stone, with which they were partly formed, was wanting. But some I have found in North Wiltshire, and they will be described in my Ancient History of that district."[b] And accordingly we find him in the second volume of his "Ancient Wiltshire" several times referring to "the Long barrows with a cist-vaen[c] (as he terms the sepulchral chamber) at the east, which in general is the highest and broadest, end."[d] In 1816, aided by his friend the Rev. John Skinner, Sir Richard carried out the exploration of the Chambered Long Barrow at Stoney Littleton, in Somersetshire, his account of which, illustrated with three plates, is printed in the nineteenth volume of the Archæologia. In 1821 he excavated with partial success the chambered barrow at Littleton Drew;[e] but, with the exception of some partial diggings about a ruined chamber at Temple

[a] See vol. i. and vol. iii. of *Memoirs of the Anthropological Society of London;* and *Two Principal Forms of Ancient British Skulls.* London, 1865 and 1869.

[b] *Archæologia*, 1817, xix. 43.

[c] Sir Richard repeatedly distinguishes the cistvaen or sepulchral chamber from the cromlech; the former being, as he observes, always sepulchral, whilst the true nature of the latter, he says, he had not evidence to determine. *Ancient Wilts*, ii. 114.

[d] *Ancient Wilts*, ii. 99, 102, 114. Roman Æra, p. 101.

[e] *Gents. Mag.* Feb. 1822, xcii. 160. See note *d* on the following page.

Farm, on the Marlborough Downs,[a] this is the only instance of an attempt made by him to explore a chambered long barrow in his own county.

Researches of the Writer and others.—My attention to this remarkable class of sepulchral monuments dates from the year 1849, when I became acquainted with an unpublished memorandum of the exploration in 1821 of that at Uley in Gloucestershire, preserved, in connexion with two skulls, in the Museum of Guy's Hospital, where it had remained for twenty years or more unknown to antiquaries. With the view of obtaining sketches of the chambers, and a correct ground-plan, a re-examination of this tumulus was obviously desirable; and, with the kind permission of the owner, Colonel Kingscote, I succeeded in effecting this in the year 1854; shortly after which a fully illustrated report of this interesting tumulus was published.[b]

In the following year I superintended the opening of the ruined chambered tumulus at Lanhill near Chippenham;[c] and, likewise, assisted G. P. Scrope, Esq., M.P., in the exploration of that near Littleton Drew, also in North Wilts.[d] In 1859 I conducted, on behalf of the Wiltshire Archæological and Natural History Society, the exploration of the remarkable chambered long barrow at West Kennet, a full description of which was printed in the Archæologia,[e] along with a brief notice of some diggings in the great long barrow on Walker Hill, also in North Wilts.[f] In 1862 and 1863, through the kindness of several members of the Cotteswold Field Club, I had the opportunity of witnessing or assisting at the exploration of the four chambered tumuli of Nympsfield, Woodchester, Rodmarton, and Charlton Abbot's, all in Gloucestershire; of which excavations more of less detailed reports have been printed.[g]

In addition to the above, there are other chambered long barrows in this part

[a] Of these diggings I think there is some notice in the MS. Collections in the Library at Stourhead, to which, several years since, I had access, through the kind permission of the late Baronet, Sir Hugh Hoare.

[b] *Arch. Journal*, xi. 315. See also *Crania Britannica*. Decade i. 1856. Description of Skull from chambered tumulus at Uley, Plate 5, xxiv. In the exploration of this tumulus I was associated with E. A. Freeman, Esq., at that time resident near the adjacent town of Dursley.

[c] See account of "The Barrow at Lanhill," *Wilts Arch. Mag.* iii. 67.

[d] "On the Cromlech-Tumulus called Lugbury, near Littleton Drew." *Loc. cit.* p. 164; and *Cran. Brit.* Dec. iii. 1858. Description of Skull from Littleton Drew, pl. 24, xxv.

[e] *Archæologia*, xxxviii. 405. *Cran. Brit.* Description of Skull, pl. 50, xxvi.

[f] *Archæologia*, xxxviii. 410. *Salisbury Memoirs, Arch. Inst.* 98.

[g] For Nympsfield and Woodchester (Bown Hill), see *Proc. Cotteswold Naturalists' Club*, iii. 184, 199; for Rodmarton, *Proc. Soc. Ant.* 2 S. ii. 275; Lysons, *Our British Ancestors*, 1865, p. 150; and *Cran. Brit.* "Description of Skull," pl. 59, xxvii.; and for Charlton Abbot's, *Mem. Anthrop. Soc.* i. 474, *Proc Soc. Ant.* 2 S. iii. 275.

of England, of the opening of which we have only meagre and imperfect accounts, or none at all. Such are those of Nempnet[a] and Orchardleigh[b] in Somersetshire: Luckington,[c] Millbarrow,[d] Temple Farm,[e] Rockley,[f] Tidcombe,[g] East Kennet,[h] and Oldbury,[i] in Wiltshire; and Leighterton,[k] Duntesbourne Abbot's,[l] Avening,[m] Gatcombe,[n] and Shurdington,[o] all in Gloucestershire. In this county, also on the Cotteswolds, so prolific in these chambered tumuli, is that at Ablington, of the partial exploration of which the Rev. S. Lysons has given an account;[p] that at Bisley, opened by Dr. W. H. Paine of Stroud in 1863, for a report of which, not printed, I am indebted to a brief note from Dr. Henry Bird; and a third at Nether Swell, particulars respecting which I owe to Professor Rolleston[q] and the Rev. David Royce, as this paper is passing through the press.

To this enumeration we must add the ruinous but very interesting chambered tumulus of Wayland's Smithy, at Ashbury, which, though in Berkshire, is on the very borders of Wilts, and geologically connected with the district of the Marlborough Downs.[r] Altogether I have here adduced twenty-eight examples of

[a] Nempnet, near Butcombe, *Gents. Mag.* 1789—1792, lix. i. 392, ii. 605; lxii. ii. 1082, 1180. County Histories of Collinson, Rutter, and Phelps; and Sayer's *Bristol.*

[b] Hoare, *Ancient Wilts*, ii. 116; Roman Æra, 102. Phelps's *Somersetshire*, vignette, p. 137. I have sketches of the stones, three in number. The ground-plan of the barrow is still quite visible.

[c] *Ancient Wilts*, ii. 100. Hoare here quotes Aubrey and Childrey.

[d] Stukeley. *Abury*, p. 46, Tab. xxx. *Salisbury Mem. Arch. Inst.* 1850, p 93. Aubrey's rude sketch in *Mon. Brit.* shows a distinct chamber of seven stones at the east end. In 1863 I dug on the site of Millbarrow, but without result. When levelled by the farmer, only a few human teeth, a jaw-bone and some teeth of horses, were met with.

[e] *Proc. Soc. Antiq.* 2 S. iii. 213.

[f] *Ibid.* ii. 309.

[g] *Wilts Arch. Mag.* viii. 155.

[h] *Salisbury Mem. Arch. Inst.* 1850, p. 93.

[i] *Mem. Anthrop. Soc.* i. 473.

[k] Rudder's *Gloucestershire*, 1779, p. 306. Aubrey, *Mon. Brit.*

[l] *Archæologia*, xvi. 361, pl. 55, 56. *Gent. Mag.* 1806, lxxvi. 871.

[m] *Archæologia*, xvi. 362, pl. 57. Fosbrooke, *Encyclop. Antiq.* 1843, pp 544, 547. Etching by T. Burden.

[n] Bigland's *Gloucestershire*, 1791, p. 92.

[o] *Journ. Brit. Arch. Assoc.* iii. 64. Wright, *Celt, Roman, and Saxon*, p. 53. *Anthropol. Review*, iii. lxvi., lxxi.

[p] *Our British Ancestors*, 1865, p. 318.

[q] Rolleston, *Journ. Anat and Phys.* 1868, iii. 252.

[r] "On Wayland's Smithy and the Traditions connected with it;" by J. Thurnam, M.D. *Wilts. Arch. Mag.* 1862, vii. 321. "Plan of Wayland's Smithy," by Professor Donaldson. *Ibid.* p. 315. A good Plan, with a sketch of the stones, made for Sir R. C. Hoare early in the present century, is preserved in the library at Stourhead. "Sketch-Book, Wiltshire," vol. iii.

chambered long barrows in these south-western counties, of the internal character of nearly all of which we have details; though as to some it must be admitted these are meagre and insignificant. They will however enable us to give a tolerably complete history of this class of sepulchral monuments, as found in this part of England.

Of the twenty-eight chambered tumuli in the opposite table, eleven are in North Wiltshire, one in Berkshire, thirteen in Gloucestershire, and three in Somersetshire.[a]

Early Notices of Chambered Barrows.—Chambered barrows seem at a very early period to have attracted the attention of treasure-seekers; and there is proof that, even in Roman times, they were often rifled by those who were unrestrained by any of those cautions with which the Gothic King Theodoric the Great guarded his decree for searching tombs for the gold which was ordered to be added to the public treasury.[b] In the very early Anglo-Saxon poem of Beowulf, there is a notice of what was evidently a chambered tumulus, the main features of which are described with considerable minuteness. In its recesses were treasures,—weapons and rich ornaments and vessels of heathen gold,—watched over, as the story goes, for three hundred winters, by a dragon. The

[a] Similar chambered tumuli may exist in Oxfordshire, and perhaps the Hoar-stones at Enstone in that county once formed a trilith on the broad end of a long barrow containing sepulchral cists or chambers. I understood, from Sir Henry Dryden, Bart., that, in his diggings about these stones in 1842, no human interment was found; but only the bones of lower animals, including the *metatarsus* and horn-cores of a small ox, the bones of fowls, and the horns of deer. With these were many worn fragments of coarse pottery, apparently Roman. Comp. *Gent. Mag.* 1824, xciv. 125. Lukis, *Bircham Barrows*, 1843, 12. *Archæologia*, xxxvii. 433.

[b] Cassiodorus *Variarum*, lib. iv. c. 34. "Dudæ Sajoni Theodoricus Rex"—[decernit ut loca adeat, ubi thesauri lateant, et si inventi fuerint, fisco addicat publico.] This Gothic prince plainly tells us—"Aurum enim sepulchris juste detrahitur, ubi dominus non habetur; immo culpæ genus est inutiliter abditis relinquere mortuorum, unde se vita potest sustentare viventium." This sentence was no doubt in his thoughts, when, referring to the searching of tombs for treasure, Sir Thomas Browne says, "for which the most barbarous expilators found the most civil rhetoric." (*Hydrotaphia*, cap. 3.) The remains of the dead, were, however, to be left undisturbed. "Ita tamen ut abstineatis manus a cineribus mortuorum; quia nolumus lucra quæri, quæ per funesta possunt scelera repetire." And the search was to be made "sub publica testificatione." The decree, indeed, bears some similarity to the license, A.D. 1324, of our own king Edward II., "De Terrâ fodendâ pro thesauro abscondito querendo." See Patent Rolls of 17th Edward II. The document is printed in Sir Henry Ellis's "Letters of Eminent Literary Men," published by the Camden Society, 1843, p. 32. See also *Arch. Journal*, xi. 322. Royal licences to dig barrows were still granted, *temp.* Henry VIII., and treasure was sought in them even by the clergy, with the rites of sorcery. (Mr. Dawson Turner, *Norfolk Archæology*, i. 41.)

TABLE 2.—EXPLORATIONS IN CHAMBERED LONG BARROWS IN WILTSHIRE, GLOUCESTERSHIRE, SOMERSETSHIRE, &c.

Nos.	Locality and Name.	Result of Exploration.		References.
		General Result.	Primary Interments.	
	WILTSHIRE:			
1	Littleton-Drew, "*Lugbury*"	Successful, 1855	Many (25) skeletons	*Gents. Mag.* 1822, xcii. 160. *Wilts. Arch. Mag.* iii. 164. *Cran. Brit.* pl. 24.
2	Lanhill; by error "*Hubba's Lowe*"	Rifled long ago; re-examined 1855	Remains of skeletons	*Wilts Arch. Mag.* iii. 67.
3	Luckington, "*Giant's Caves*"	Rifled long ago; cists left uncovered	Result unknown ...	*Ancient Wilts*, ii. 100.
4	Monkton, "*Millbarrow*"	Rifled and levelled	Result unknown ...	Stukeley, *Abury*, 46, Tab. xxx. *Salisbury Mem. Arch. Inst.* 93.
5	West Kennet	Successful, 1859...	Several (6) skeletons	*Archæologia*, xxxviii. 405. *Cran. Brit.* pl. 50, xxvi.
6	East Kennet	Only attempted as yet	— —	*Salisbury Mem. Arch. Inst.* 1850, 98.
7	Walker Hill, "*Old Adam*"	Rifled; attempted again, 1860 ...	Traces of skeletons	*Ibid.* p. 98. *Archæologia*, xxxviii. 410.
8	Temple Farm	Rifled and left uncovered...	Result unknown ...	*Proc. Soc. Ant.* 2 S. iii. 213.
9	Rockley	Rifled and left uncovered...	Result unknown ...	*Ibid.* 2 S. ii. 309.
10	Tidcombe	Probably rifled; attempted again ...	Result unknown ...	*Wilts Arch. Mag.* viii. 155.
11	Oldbury	Successful, 1864...	Three skeletons ...	*Mem. Anthrop. Soc.* i. 473.
	BERKSHIRE:			
12	Ashbury, "*Wayland's Smithy*"	Rifled and left uncovered...	Result unknown ...	*Wilts Arch. Mag.* vii. 321.
	GLOUCESTERSHIRE:			
13	Uley, "*Hetty Pegler's Tump*"	Successful, 1854...	Many (15) skeletons	*Arch. Journ.* xi. 315. *Cran. Brit.* pl. 5, xxiv.
14	Nympsfield...	Successful, 1862...	Many (12) skeletons	*Proc. Cotteswold Nats. Club*, iii. 184.
15	Rodmarton, "*Windmill Tump*"	Successful, 1863...	Many (13) skeletons	*Proc. Soc. Ant.* 2 S. ii. 275. Lysons, *Our Brit. Ancestors*, 150. *Cran. Brit.* pl. 59, xxvii.
16	Charlton Abbot's, "*Belas Knap*"...	Successful, 1863...	Many (30) skeletons	*Mem. Anthrop. Soc.* i. 474. *Proc. Soc. Ant.* 2 S. iii. 275.
17	Woodchester	Rifled; partially successful, 1863 ...	Remains of skeletons	*Proc. Cotteswold Nats. Club*, iii. 199.
18	Ablington	Successful, so far as gone, 1864 ...	Skeleton	Lysons, *Our Brit. Ancestors*, 1865, 318.
19	Bisley	Successful in part, 1863	Remains of skeletons	Letters from Dr. Hy. Bird and Dr. W. H. Paine
20	Leighterton, "*West Barrow*"	Successful ? c. 1700...	Many skeletons ...	Rudder, *Gloucestershire*, 1779, 306. Aubrey, *Mon. Brit.*
21	Duntesbourne Abbot's, "*Hoar Stone Barrow*"	Successful, 1806...	Many (9) skeletons	*Archæologia*, xvi. 361. *Gent. Mag.* lxxvi. 871.
22	Avening	Successful, 1806...	Many (11) skeletons	*Ibid.* 362. Fosbrooke, *Encyc. Ant.* 1843, 544, 547. Etching by T. Burden.
23	Gatcombe, "*Tingle Stone Barrow*"	Not yet explored	— —	Bigland, *Gloucestershire*, 1791, p. 92.
24	Shurdington, "*Crippett's Barrow*"	Only attempted as yet	— —	*Journ. Brit. Arch. Ass.* iii. 64. *Anthrop. Rev.* iii. lxvi. lxxi.
25	Nether Swell	Levelled and explored, 1868	Several (3) skeletons	Rolleston, *Journ. Anat. and Phys.* 1868, iii. 252.
	SOMERSETSHIRE:			
26	Stoney Littleton	Successful, 1816...	Many skeletons ...	*Archæologia*, xix. 43.
27	Nempnet, "*Fairy's Toote*"	Successful, 1789...	Many skeletons ...	*Gents. Mag.* 1789-1792, lix. (1), 392 (2), 602, lxii. (2), 1082, 1188.
28	Orchardleigh	Rifled and partially levelled	Result unknown ...	*Ancient Wilts*, ii. 116. *Rom. Æra*, 102. Phelps's *Somersetshire*, 137.

barrow was of stone, with a passage under it unknown to men, the work of giants, the cave within built up with stone arches and made fast on props.

> Beneath the hoary stone,
> Under the earth-mound,
> On giant's work he gazed;
> The eternal cave held fast
> On props, with vaults of stone![a]

One of the commentators on Beowulf confidently assigns an exact locality for this tumulus, and places it at Eaglescliffe in Durham.[b] Before leaving this passage in our old-world poem, it may be worth noting that in the great chambered tumulus of Maeshow in Orkney, which, from the Runic inscriptions on its walls, seems to have contained much treasure, there is actually the figure of a dragon drawn with much art and archaic skill. The notion that hidden treasure was watched over by dragons, was a common one in the middle ages; and as an instance, may be cited the barrow of Wormelow at Bromfield near Ludlow, where, in 1344, according to Thomas of Walsingham, the dragon that guarded it was slain through the incantation of a Saracen physician, and the retainers of Earl Warren obtained great treasure of gold.[c] Again, in the Life of St. Guthlac, written in the ninth century, by Felix of Croyland,[d] we read, "There was on the island (of Croyland) a great mound raised upon the earth, which of yore men had dug and broken up in hopes of treasure. On the other side of the mound a place was dug, as it were, a great water-cistern."

These notices of the rifling of barrows, and especially of those containing chambers, are of much interest, and not unimportant, when we endeavour to explain the great rarity of finding a tumulus of this description with one even of

[a] Beowulf, c. 34, 36, 37.

[b] Haigh, *Anglo-Saxon Sagas*, ed. 1861, p. 84. Mr. H. Morley (*Fortnightly Review*, Feb. 1868, p. 121—130) holds similar, though not identical, views as to the topography of Beowulf.

[c] Thom. Walsingham, *Hist. Brevis Angl.* ed. 1574, p. 155. T. Wright, F.S.A., *History of Ludlow*, 1841, p. 27. Mr. Wright thinks the barrow referred to by Thomas of Walsingham may even now be identified. Ludlow probably derives the last syllable of its name from a tumulus, apparently chambered, described as a very large mound on the site of the present churchyard, which, in the year 1199, was cleared away. In effecting the removal three stone chambers or cists—"tria mausolea lapidea"—were discovered, containing skeletons, which the clergy of the place maintained were the relics of three Irish saints, and buried them within the Church, in the faith of the thaumaturgic powers of the relics. Leland, *Collect.* iii. 407. Wright, *loc. cit.* p. 14.

[d] *Life of St. Guthlac*, sec. 4. Guthlac, according to the *Anglo-Saxon Chronicle*, died A.D. 714.

its chambers unrifled and intact.[a] The practice indeed, as shown by the late J. M. Kemble, in his "*Notices of Heathen Interment*" in the "*Codex Diplomaticus*,"[b] must have been quite common in very early times. Mr. Kemble, in the paper referred to, instances a *stone cist* named in an Anglo-Saxon charter of the time of Cnut, in the boundaries of lands at Cheselburne (not Chiselden, as he has here written, misquoting the Charter), as "the stone cist on Holcombe,"—ðа stáncysten on Holancumbe—(the hollow hill or mound—the hill with a cavity or chamber in it), and which it is not improbable may have been a sepulchral barrow of the kind we are considering.[c] The celebrated sepulchral stone chamber, *Wayland's Smithy*, is singularly passed over by Kemble in this paper, though named at length in one of the charters edited by himself.[d] The term *smithy*—the workshop of the invisible smith—the Weland or Vulcan of the North—is not likely to have been applied to this monument, unless the chamber had been already disclosed and uncovered. We know, from the date of the charter, that it was so called in the time of Eadred, in the middle of the tenth century, but for how long before this we cannot even conjecture. That it formed part of, and was originally covered by, a *long* barrow, and not, as for the most part supposed, by a *round* one, I have shown in a paper printed in the *Wiltshire Archæological Magazine*.[e]

The character of these megalithic tombs, so different from anything with which our rude Saxon ancestors were familiar, explains their being associated, as in the case of Weland's Smithy, with heathen and superstitious traditions. Their great size no doubt gave rise to their being regarded as the abodes or burial-places of giants. Giants' Chambers, *Jettestuer*, is the name by which they are commonly known in Denmark; and one with like signification, *Hünenbetten*,[f] is their desig-

[a] The Vikings of Norway were great riflers of grave-mounds. (Keyser, *Religion of Northmen*, 306.) In the *Annals of Ulster*, A.D. 862, is the record that the great chambered tumulus of Dowth on the Boyne was searched by the Norsemen of Dublin. [b] *Arch. Journ.* xiv. 119, and re-printed in *Horæ Ferales*, p. 107.

[c] *Arch. Journ.* xiv. 129, 134. The *Ceósulburne* of this charter (printed in *Codex. Diplom.* No. 730, A.D. 1019), was clearly identified by Kemble with Cheselborne in Dorset. *See* Index to *Cod. Dipl.*, *sub vocibus* Ceósulburne, Berteswell, Gretindún, and Holancumb, all places named in the charter. It was perhaps by a mere slip of the pen that Kemble wrote "Chiselden in Wiltshire" in the article in the *Archæological Journal*.

[d] "Welandes Smiððan." Cod. Diplom. No. 1172, *temp.* Eadred. A.D. 955.

[e] Vol. vii. 321. "On Wayland's Smithy, and on the Traditions connected with it." Sir R. C. Hoare had already correctly described it as having been "a long barrow with a cistvaen of stones within it." *Ancient Wilts*, ii. 47.

[f] The term *Hünenbetten* (Germ.), *Hunebedden* (Dutch), has been erroneously supposed to mean the Huns' graves. (*Archæologia*, xxxiv. 442.) *Hüne*, in German, is a giant.

nation in North Germany and in Holland. The same name occurs in Wiltshire, where the long barrow of Fyfield (Table I. No. 19) is the *Giant's Grave*, whilst the chambered tumulus of Luckington (Table II. No. 3) is known as the *Giant's Cave*s, "in the language," says Childrey, by whom it was described in the seventeenth century, "of ignorance, fear, and superstition." In Denmark, chambered tumuli have as a second name that of Fairies or Goblins' Chambers, *Troldestuer*. The same term is applied to them in England. Thus that at Nempnet, in Somersetshire, was called the *Fairy's Toote*, being regarded, the Rev. T. Bere tells us, "as the haunt of ghosts, goblins, and fairies,—the electrical tremblings," he adds, "of very remote superstition."

Geographical Distribution.—Chambered barrows, though so much more common in the part of England to which our observations refer than elsewhere, are by no means confined to it. It is however doubtful whether those of distant counties do not differ from those of the south-west in more or less important particulars. Those of Derbyshire and Staffordshire, described by Mr. Bateman, might be thought analogous, but the descriptions given by him are wanting in that precision which would alone justify a confident opinion.[a] We are indeed for the most part left in doubt whether the tumuli themselves were long or round. In other parts of England, including the Scilly Isles, in Wales, in the Channel Islands, in Britany, in the north of Scotland,[b] in the Orkneys, and in Ireland, there are chambered barrows which are not elongate but circular in form. Some of those in Britany, originally circular, have been transmuted, apparently by successive additions, from the round to the long form;[c] though there are others in that part of France which, like the chambered barrows of our south-western counties, were always and from the beginning elongate. No circular chambered barrow is known to exist, or has by any one been described, in this part of England; nor does evidence now exist that in any instance a tumulus of this

[a] The best examples—Minning-low, and that at Five Wells, Taddington—both appear to be *circular* tumuli, but the megalithic structures covered by them are true *chambers*. *Vestiges*, 39, 91. *Ten Year's Diggings*, 82. Long-low, near Wetton (*Vestiges*, 144), though containing a *cist*, rather than a chamber, is perhaps a true long barrow, notwithstanding the doubts as to this, which arise from Mr. Carrington's latest diggings. (*Reliquary*, 1864, v. 27.) Mr. Ll. Jewitt believes that the elliptical barrows of Derbyshire were originally circular. *Intellect. Observer*, Oct. 1867, p. 181.

[b] In Caithness there are, however, long as well as circular chambered cairns; but they are probably contemporary, as the principle of construction in the two is identical. See the descriptions and plans of these singular structures in *Mem. Anthrop. Soc.* ii. 226. That at Yarhouse, of the chamber in which a ground-plan is given in our Plate XIV. fig. 8, is a long cairn, 240 feet in length.

[c] See paper by Rev. W. C. Lukis "On some Peculiarities in the Construction of Chambered Barrows." *Journ. Brit. Arch. Assoc.* 1866, xxii. 249.

description, originally round, has been developed into the long form by gradual additions. The lengthened oval form for this district of England has thus a generic value; which, however, the study of the chambered tumuli of other districts, and those not very remote, proves not to be of universal application. It may indeed be inferred that the circular chambered barrows of other parts of Great Britain, Ireland, and France are generally, if not always, of the stone period, and in a general sense contemporary with those of elongate form in the three counties of Wilts, Gloucester, and Somerset; but it is to these last as long known to myself that I shall restrict my attention; comparing them where it appears desirable with those of other countries and districts.

Geology.—At the commencement of the present communication it has been pointed out, after Sir Richard Hoare, that the absence of chambered long barrows in South Wiltshire and Dorsetshire appears to be due to the fact that in those chalk regions there is an absence of stone suitable for the construction of chambers. Scattered blocks of silicious grit or sarsen stone are indeed found here and there on the surface, but they are neither numerous nor large enough for this purpose. In North Wiltshire and the adjacent part of Berkshire the case is different; and sarsen stones of large dimensions and in great numbers are found in the hollows of the higher chalk downs. From these were derived the immense stones of the circles and avenues of Avebury; and, as most geologists and antiquaries believe, those out of which the great trilithons and mortised uprights and imposts of Stonehenge, itself in South Wilts, were formed. Of the chambered barrows of Wiltshire, which, inclusive of Wayland's Smithy, just over the border, are twelve in number, nine, all in the chalk district, have, as was to have been expected, the chambers formed of the hard silicious or sarsen stones to which we refer. These stones, requiring no dressing, and probably admitting of none with the tools then in use, have been merely selected from their beds on the surface of the chalk, according as their form was suited to the purposes of the builders. In the three other chambered barrows of Wiltshire (standing first in Table 2), the case is different. These lie on the oolite, and in a district geologically connected with that of the Gloucestershire Cotteswolds.[a] Thus the chambers of seventeen of these barrows, of which thirteen are in Gloucestershire, are constructed of some form of oolitic

[a] This "hill-country of Gloucestershire" has been described by the Rev. Sydney Smith, as "one of the most desolate countries under heaven, divided by stone walls, and abandoned to kites and crows." He is contrasting its sterility and nakedness with the comfort, opulence, and beauty of the adjacent deep and shaded vale of Severn. *Sketches of Modern Philosophy*, p. 213.

stone, such as occurs in quarries close to the surface and is very easily worked. Of the chambered barrows of Somersetshire that of Nempnet, the wanton destruction of which is greatly to be deplored, is said by Phelps to have been constructed of "white lias." I am informed by Mr. C. Moore, F.G.S., that the chambers of the Stoney Littleton barrow, still happily perfect, are of the *lower lias;* and, as may be safely assumed, from beds which are still worked in the immediate neighbourhood of the barrow.[a] The two upright stones on the Orchardleigh barrow are of the inferior oolite; the third flat-stone is a quartzose boulder of the kind known as "water flints" in this part of Somersetshire.

Position and Size.—As we found was the case with the unchambered, so likewise the chambered long barrows do not occur in groups as do the circular barrows of the bronze period, but are for the most part a considerable distance apart. Those of East and West Kennet in Wiltshire and of Uley and Nympsfield in Gloucestershire are severally within a mile of each other, but such a degree of proximity is unusual. They occur on jutting promontories or on the summits of hills, with a prospect over the surrounding country in almost every direction, and often to a great extent. Generally speaking, they are not of such large dimensions as the unchambered long barrows; varying mostly from about 120 to 200 feet in length, and from 30 to 60 feet in breadth. Those of East and West Kennet, however, are not less than 350 feet in length; thus nearly equalling in their longitudinal dimensions those of the largest of the unchambered long barrows, viz. that of Tilshead Old Ditch.

Orientation.—As to their position in regard to the cardinal points, at least two out of three lie due east and west, with their chambered ends, which are usually the highest and broadest, to the east. This definite orientation, however, may have been equally intended in those barrows which point to the south-east rather than to the east or north-east; and the deviation, if not accidental, may imply that such barrows were erected during the winter solstice. If these be regarded as pointing eastward, then we count four out of every five as having a definite orientation. In about one out of every five, however, the mound lies distinctly north and south; and, as regards these, it is observable that in some the chambered

[a] Though formed chiefly of liassic stone, this tumulus stands on the oolite, but the lower lias comes to the surface in the valley, about a quarter of a mile distant. Mr. Moore tells me that the two slabs which form the sides of the central chamber immediately within the entrance differ from the rest in being of a silicious sandstone of oolitic age. The smaller roofing stones and those of the original inclosing walls are of *lias*. Mr. Moore suggests that the two silicious stones may have been supplied when the tumulus was in part restored.

or broad end is to the north, in others to the south. Exactly the same variety of arrangement was observed in the unchambered long barrows. At Nempnet and in Wayland's Smithy, the southern end is or was the chambered one; at Charlton Abbot's,[a] Ablington, and Gatcombe Park, the northern.

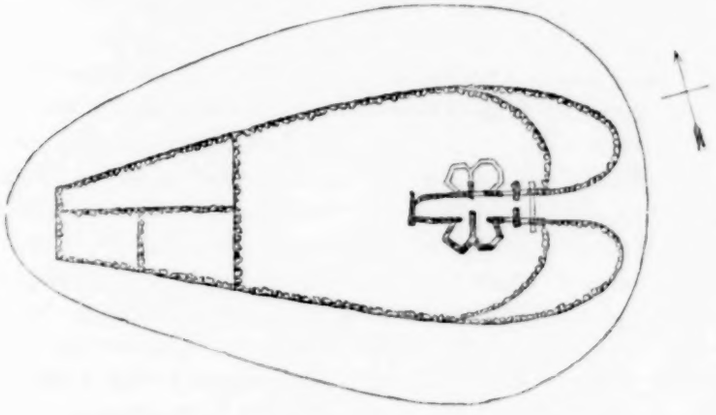


Fig. 7. Ground Plan of Chambered Barrow at Uley, Gloucestershire.

External Basement Walls and Peristaliths.—The lateral ditches, which are so marked a feature in the unchambered long barrows, are for the most part but slightly developed in those which are chambered. In a few, however, they are strongly marked; as in that at Walker Hill; and in some cases where not visible on both sides, are so on the south, as at Littleton Drew and Orchardleigh. In the oolitic region, in which these barrows chiefly occur, the superficial strata—whether "corn-brash," "coral-rag," or "Stonesfield slate," afford a building material which the architects of these tombs did not fail to utilize. Nearly all of them are found to have been surrounded by a dwarf dry wall of this material, laid in horizontal courses, neatly faced on the outside, and carried up to a height of two, three, or four feet.[b] In this way was produced a supporting wall or *podium*, which, as has been well observed, in regard to the artistic sepulchres of the Etruscans, "not only defined the limits of the tomb and gave it dignity, but

[a] A plan of this barrow, termed Belas or Bellers Knap, will be found in *Mem. Anthrop. Soc.* i. 474, and in *Proc. Soc. Antiq.* 2 S. iii. 276.

[b] At Rodmarton, "*a double wall* appears to have been erected entirely round the tumulus." (Lysons, *Our British Ancestors*, p. 138.) It was double also at Ablington, and further researches may show that it was so generally. It is so at least in the chambered cairns of Caithness. *Mem. Anthrop. Soc.* ii. 242.

enabled entrances to be made in it, and otherwise converted it from a mere hillock into a monumental structure."[a] Such supporting walls were used from an early period, in the construction of the earthen tumuli of the ancient Greeks. Thus of that of Patroclus and Achilles, in the *Iliad*, it is said,

> They marked the boundary of the tomb with stones,
> Then filled the inclosure hastily with earth.[b]

So likewise the tumulus in Arcadia, regarded in Homer's time as that of Æpytus, is described by Pausanias as a mound of earth enclosed at the base by a stone-wall set round in a circle.[c] Amongst the less civilized people of Northern Europe, the same mode of constructing barrows obtained; and in Beowulf we are told that the tumulus of the hero of the poem was "surrounded with a wall, in the most honourable manner that wise men could devise it."[d]

Not only were our chambered barrows surrounded by dry walling, sometimes single, but often double and concentric, but they were often intersected by transverse and longitudinal walls, which seem to have had no particular object, beyond that of giving strength and solidity to the whole; and of forming perhaps temporary causeways, over which those engaged in their construction might convey the stone rubble and earth with which to fill up the entire mound. At Rodmarton and at Ablington, it was noticed that the rubble stone of which the mounds were formed was not thrown together at hap-hazard, but had been piled up more or less regularly. At Ablington, in particular, the layers of loose stones had been placed in a slanting position, and converged towards the centre, in a ridge-like fashion, like the roof of a house; giving to the whole, as seen in section, an almost pyramidal aspect.[e] It is of more interest, however, to notice the manner in which the enclosing wall was connected with the entrance to the chambers; in the neighbourhood of which it was usually carried up to a much greater height than elsewhere, and, as at Charlton Abbots, to an elevation even of seven feet. As the lateral walls approach the broad and high end of the tumulus, they turn inwards by a bold but gradual curve; and so finally abut on the two

[a] Fergusson, *Architecture*, p. 290.

[b] *Iliad*, xxiii. 255. Mr. F. A. Paley ("On Homeric Tumuli," *Trans. Camb. Phil. Soc.* xi. 2) gives reasons for thinking that the tumulus of Patroclus and Achilles, here described, was not circular, but like our chambered long barrows, and the "ship barrows" of Scandinavia, of elongate form.

[c] *Iliad*, ii. 604. Pausanias, lib. viii. c. 16, *λίθου κρηπῖδι ἐν κύκλῳ περιεχόμενον*. Comp. Herod. i. 93.

[d] Beowulf, c. xliv.

[e] Lysons, *Our British Ancestors*, pp. 138, 318; also letter to the writer, of July 2, 1864; and *see* our woodcut on a subsequent page.

large standing stones, which in the best marked examples of these chambers form the door jambs to the entrance. The gracefully rounded double-convex curve of the walling in this situation has not inaptly been compared to "the top of the figure of the ace of hearts in a pack of cards."[a]

On the Chalk Downs of North Wiltshire, where the natural sarsen blocks of which the chambers are formed are common on the surface, the base of the barrow has in several instances been surrounded by a series of such stones placed erect at regular intervals. Natural obelisks of this description formed complete peristaliths to the chambered barrows of Millbarrow, West Kennet, and Wayland's Smithy; as we know from the sketches made by Aubrey late in the seventeenth, and by Stukeley early in the eighteenth century, the accuracy of which is attested by the scanty remains in the two last now alone visible.[b] It is a curious circumstance that the practice of erecting such *stelæ* is referred to by Aristotle, as existing amongst the warlike Iberian people, where he tells us that as many "obelisks were placed around the tomb of the dead warrior as he had slain enemies."[c] I will not insist on this passage as evidence in favour of the Iberian origin of the ancient Britons of the stone period, for this part of our island, though it is not altogether without value in such connection. Continuing the description of the barrows themselves, it must be noted that in

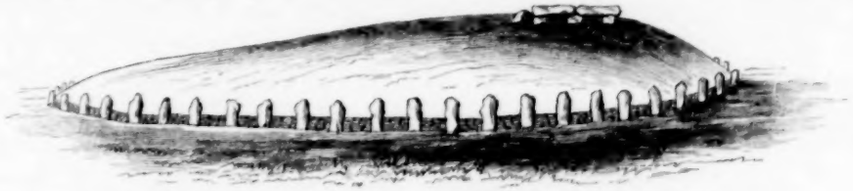


Fig. 8. Long Barrow at West Kennet, with Peristalith and Walling (restored).

two instances, by excavating between the ortholiths or standing stones, at the base of the chambered barrows of North Wiltshire, I have found distinct traces of dry walling, carried up for three or four courses, and formed of "coral-rag," such as

[a] Lysons, *Our British Ancestors*, p. 318. In the Caithness chambered cairns the external basement walls form large double *concave* curves where they abut on the entrances. They have hence been designated "horns." *Mem. Anthrop. Soc.* ii. 227, 241.

[b] *Archæologia*, xxxviii. 410, where will be found descriptions of the remains of such peristaliths at West Kennet and Walker Hill. Peristaliths, though rare, occur in the chambered long barrows of Britany, as at Mané-Lud and Kerlescant. In those of Scandinavia they are found not only at the base, but likewise high up on the summits of the tumuli, as seen in the ground-plan of that of Hammer, in the island of Zealand. *Proc. Soc. Ant.* 2nd S. iii. 309.

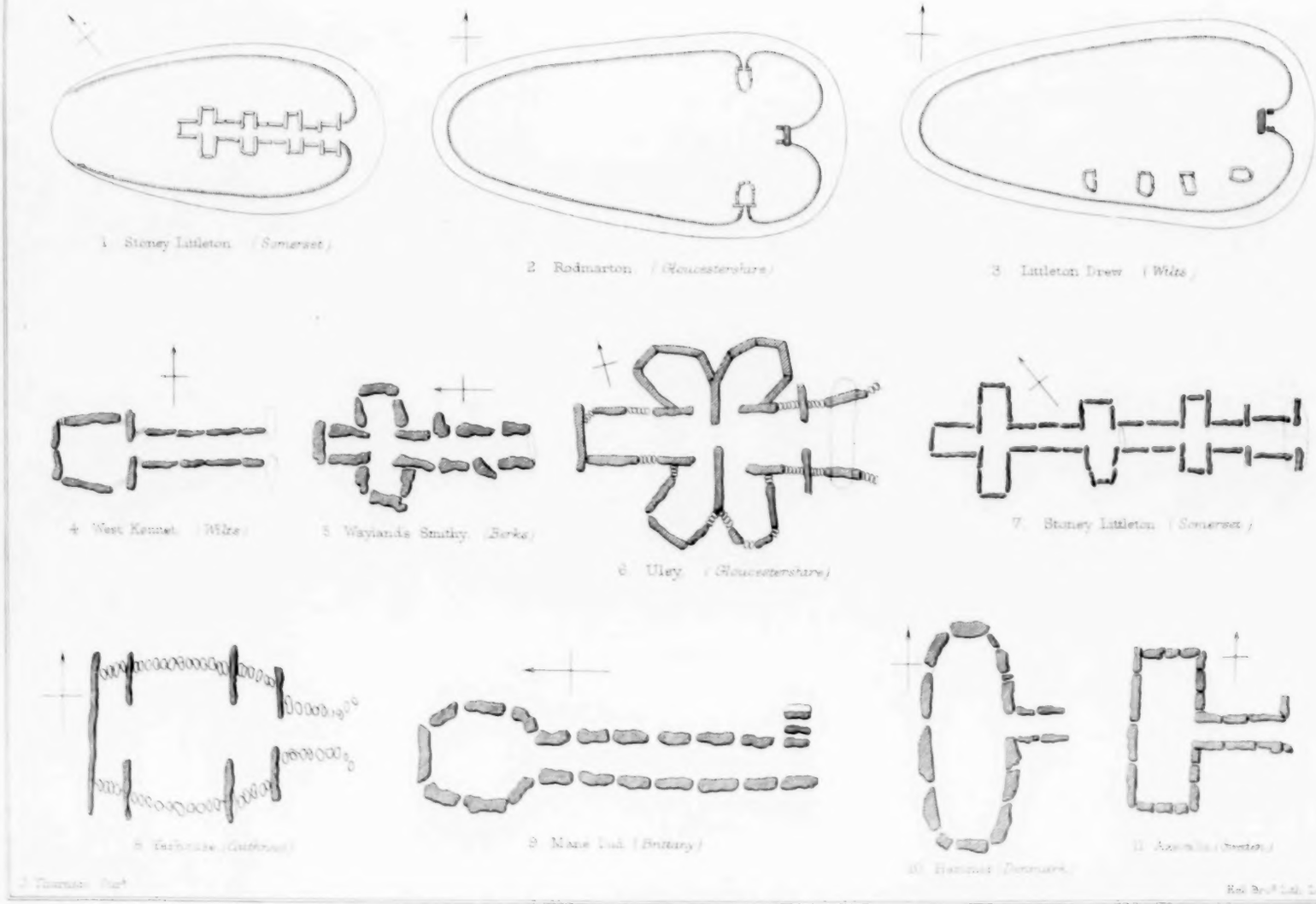
[c] *Politica*, viii. 2. The term used is ὀβελίσκοι.

is yet used for walls, and which must have been brought a distance of several miles, from the oolitic valleys to the west. This dry walling was no doubt much higher originally, and not less probably than two or three feet in height. Supposing, as seems likely, that the bases of these tombs were originally uncovered by turf or rubble, a peristalith formed by a combination of standing stones and horizontal masonry, similar in its main features to that by which the topes of India are inclosed, must have exhibited a rude elegance, such as we should scarcely have looked for in the age to which these monuments must be assigned.

Internal Structure.—The chambered long barrows present three principal types, as regards the plan of their internal construction.

Type I. Chambers Opening into a Central Gallery. (Plate XIV. fig. 1.)—The first in order of importance, and to which the designation of chambered barrow is more especially appropriate, is that furnished with a central avenue or gallery, having a doorway or entrance at one end, by which it was entered, though frequently only in the stooping posture, or even by going on "all fours." This mode of access may indeed be regarded as the essential character of a sepulchral chamber, as distinguished from a *vault* or *cist*, of however large proportions, the interior of which can only be reached, after raising the covering stone, from above. The central avenue or gallery is situate at the broad end of the tumulus,[a] and, like the side-chambers often opening out from it, is formed of two rows of stones set on edge, supporting others laid horizontally across, and having the interstices between filled up with horizontal walling, similar to that described as supporting the base of most of these mounds. In the finest examples of chambered barrows, as those of Uley (No. 13), Stoney Littleton (No. 26), and Nempnet (No. 27), the entrance to the avenue is, or was, by a well-built doorway, formed of two standing and one transverse or horizontal stones, which three stones (*trilithon*) are, for the most part, of larger and more massive proportions than any of the others entering into the composition of the chambers (*see woodcut on the next page*). This door-way is found several feet within the skirt or general base-line of the tumulus, and fills up the bottom of the doubly-recurved, heart-shaped dry-walling already described. The entrance, varying from two and a half to four feet in height, was closed by a large stone on the outside; which could be rolled

[a] As a general rule, the narrow ends of the chambered long barrows are entirely devoid of any sepulchral chambers or deposits, for which many, if not most of them have been searched in vain. In those of Charlton Abbot's and Ablington, however, cists containing skeletons, apparently contemporary with the principal chambers in the former, have been found at the narrow end.



GROUND PLANS OF CHAMBERED LONG BARROWS, AND OF CHAMBERS CONTAINED IN THEM.

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away as required, and was itself covered up with the rubble-stone and earth of which the barrow in general was formed.



Fig. 9. Entrance to Chambers at Uley.

a. (Plate XIV. fig. 4).—In the simplest variety of chambered barrows of the first type, as defined above, the gallery leads into a single terminal chamber of quadrangular form, as in that of West Kennet (No. 5). In this instance, the narrow covered passage or gallery (*allée couverte*) leads from the skirt of the barrow to the entrance to the chamber, formed, like it, of standing and horizontal stones, though of smaller dimensions. This variety of chambered barrow approaches closely to the type of those of Scandinavia, the well-known "gallery tombs," or "giants' chambers."[a] In these, however, the chambers are more usually of oblong form, and are placed at right angles with the longer or shorter avenues or galleries of approach, the ground-plan having a general resemblance to the Roman capital letter **T**. This prevalent configuration has given rise to their designation of *half-cross tombs*.[b] (Plate XIV. figs. 10, 11.)

β. (Plate XIV. fig. 5.)—In the second variety of the first type, of which Wayland's Smithy is a good example, in addition to a small terminal chamber, there are two lateral chambers facing one another, one on each side of

[a] For which, see the works of Worsaae, the late Lord Ellesmere, and the ground-plans by M. Boye, in Sir John Lubbock's "Pre-Historic Times," p. 105, in *Proc. Soc. Ant.* 2 S. iii. 309; and lastly those in Nilsson's *Primitive Inhabitants of Scandinavia—Stone Age*, by Sir J. Lubbock, p. 124, pl. xiv. figs. 243—245. For views of gallery and chambers at West Kennet, see *Archæologia*, xxxviii. 411.

[b] Both oval and circular chambers do, however, occur, but in all the approach is by a longer or shorter passage or gallery. Hence their Swedish name of *Gong-grifter, passage* or *gallery tombs*. Nilsson, l. c. 147.

the central gallery, in the form of a Latin cross, so as to present an arrangement like that of transepts in a church.

γ. (Plate XIV. fig. 6.)—In other instances, as at Uley (No. 13) and Nympsfield (No. 14), there are two pairs of such lateral chambers or transepts.[a]

δ. (Plate XIV. fig. 7.)—At Stoney Littleton (No. 26) there are three pairs, and at Nempnet (No. 27), there were probably not less than five or six pairs of chambers arranged opposite to one another on each side of the elongated central avenue.

Sometimes, as at Stoney Littleton, the interior has been divided into two portions by a stone placed across or at right angles with the central gallery. The entrance to the chamber at Uley was closed by flat stones similarly placed; and in other cases the passages leading to them were by the same means divided into two portions, just as the vestibules and entrances to the chambers in the Pyramids were closed by portcullises of granite.[b]

Roofing. Horizontal Arch.—For the most part, as already stated, the roofing of the central gallery, as well as that of the side chambers, was formed of large blocks of stone laid across and supported by the opposed props or uprights. Sometimes, however, the principle of the horizontal arch was resorted to. At

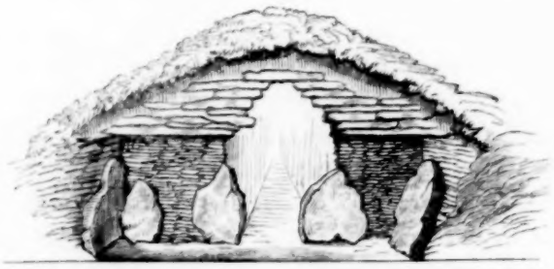


Fig. 10. Transverse Section of Gallery and Chambers, Stoney Littleton.

Stoney Littleton, as seen in one of Sir R. C. Hoare's plates, this plan is carried out in the central avenue; and "a rude kind of arched roof made by stones

[a] At St. Guenolé, Finisterre, there is a circular chambered barrow, with two pairs of side chambers, like those at Nympsfield and Uley. (Rev. W. C. Lukis, *Journ. Brit. Arch. Assoc.* xxii. 259, pl. xvii. fig. 12.) Such complex chambers, however, appear to be rare in the tumuli of Britany. They are generally very simple, often more so than that of Mané Lud, selected for illustration in Plate XIV. fig. 9.

[b] Kenrick, *Ancient Egypt*, i. p. 121. In the chambered barrows of Scandinavia, we are told,—"At the entrance to the chamber, and sometimes also in the passage itself, it was most commonly the practice to

so placed as to overlap each other."[a] At Uley, when opened in 1821, one of the side chambers retained the same kind of roofing: "near the top of the side walls, a course of the horizontal stones was made to overhang the course below it, the next to overhang this again, and so on, giving a domed form to the roof, which was closed in with a single flat stone at the top."[b] This structure of a domical roof, formed on the principle of the ancient horizontal arch, seen in the interior of the Pyramids, in the archaic Greek tombs at Mycenæ and Orchomenus, and in a ruder form in these tombs of barbaric Britain, is, as compared with the latter, still further developed in the great circular tumuli of the Boyne, in those of Caithness, and in that gigantic tumulus, or rather we may say pyramid of the north, Maeshowe in Orkney. In the chambered tumuli of Scandinavia this vaulted roofing is not met with, and we are expressly told in the *Guide to Northern Archæology*, by the Royal Society of Antiquaries of Copenhagen, that "nothing has as yet been observed approaching to the form of an arch in the stone sepulchres of the North."[c] In Britany, on the contrary, several examples of it have been found; and it is not improbable, as Mr. Lukis suggests, that we ought to accept this mode of construction as evidence of advanced skill in the art of building, and as belonging to a later period than the simple flat ceilings of large stones laid athwart the upright props.[d]

Type II. Chambers opening externally. (Plate XIV. fig. 2.)—In the second type of the chambered barrows of this part of England there is no central gallery, but side-chambers, which open outwards, near the base of the barrow, though at some distance within the inclosing wall. These side-chambers are generally in

place a door or shutter, which, if still remaining, must be carefully drawn up or out of the grooves into which it was inserted." Sometimes this door had been of wood, and not stone, as seen by the mouldered remains. *Guide to Northern Archæology*, p. 101. "The pyramids are but huge petrified barrows, and the same general principle of internal construction may hold good for both." Rev. A. C. Smith, *Nile and its Banks*, 1868, i. 87.

[a] *Archæologia*, xix. 46, pl. 3.

[b] *Arch. Journal*, xi. 319, 326.

[c] Edited by the Earl of Ellesmere, 1848, p. 78.

[d] *Journ. Brit. Arch. Assoc.* xxii. 256, 262. See plate 16, figs. 6, 9, for such arched roofs, in the chambered barrows at Mané Lud and at Moustoir-Carnac, both in Morbihan, Britany. The presence of this horizontal arch, as it is technically termed, in the Pyramids of Egypt, is one of several features which would suggest the possibility of their having been the prototypes of the comparatively rude and insignificant chambered tombs of North-Western Europe. The chief passage in the Great Pyramids is roofed over with the help of eight over-lapping courses of stone; for, as Mr. S. Sharpe ("History of Egypt" and "Description of Egyptian Court," p. 45) tells us, "though the form of the arch had been admired, its principle was not yet understood"

pairs, the one nearly opposite to the other, not far from the broad end, and near what may be called the shoulders of the mound. The best examples of this type are the long barrows at Rodmarton (No. 15), Charlton Abbot's (No. 16), Avening (No. 22), and Nether Swell (No. 25): that as yet only partially explored at Ablington (No. 18) is probably of the same character.[a] This type of barrow may be conceived of as the equivalent of that with internal side-chambers, with the chambers turned outwards. The "vaults" in the barrow at Leighterton, explored nearly two centuries since, and described as follows in Rudder's History, were, I think, chambers of this description:—"There is a large tumulus at Leighterton, called 'West-barrow,' which was opened by Mr. M. Huntley, in which he found three vaults, arched over like ovens, and at the entrance of each an earthen urn; wherein (*i.e.* in the 'vaults') were many ashes and men's bones imperfectly burnt and broken; but the skulls and thigh-bones were whole."[b]

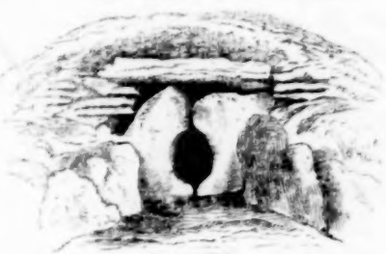


Fig. 11. Tolmen Entrance at Avening.

Access to the external chambers now under consideration was given by short and narrow passages formed of standing and horizontal stones; or more frequently by a mere continuation (or *diverticulum*) of the inclosing wall of the mound.[c] These chambers or vaults are generally of a nearly square form. They are closed in front by two upright stones, naturally hollowed in the centre, so as when placed side by side, to leave a sort of port-hole in the centre, through which the tomb might be entered in the creeping posture (see fig. 11). The Gloucestershire antiquary Fosbrooke, who was present at the opening of the Avening tumulus (No. 22) in 1808, observes, "the structure was obviously adapted to the object of successive interments; the practice having evidently been to dig away the soil

[a] The chambered tumulus at Fontenay, near Caen (*Mem. de la Soc. des Antiq. de Normandie*, 1831–33, p. 275, pl. xix.—xxii., *Mem. Anthrop. Soc. Lond.* i. 134), had ten domical chambers arranged in pairs opposite to each other, each with its gallery of approach opening on the exterior of the tumulus. The mound was circular, but the principle on which the chambers and their entrances were arranged is identical with that seen in this type of chambered long barrow.

[b] Rudder's *Gloucestershire*, 1799, p. 306.

[c] At Rodmarton the passage leading to the north chamber was constructed in the former, that to the south chamber in the second manner. At Charlton Abbot's the entrance to the two chambers (C. and D. on Plan, *Proc. Soc. Antiq.* 2 S. iii. 276) were likewise formed in this latter mode, the inclosing wall dipping inwards, and leaving a passage between of about two feet in width.

which filled the approach, to insert the body in the vault, and cover all up as before."[a] This was still better seen in the two chambers of the Rodmarton tumulus, in which the spaces between the tops of the two upright stones forming the port-hole and the lower surface of the horizontal covering stones were carefully filled up with dry walling (see fig. 12[b]), and the stones containing the openings, or the *tolmens*, as they are termed by Mr. Lysons, were covered on the outside by second large stones, and these again by stone rubble, both of which had to be removed before the chambers could be entered from without.[c] The mode of formation of the entrances to the external side-chambers in the tumulus at Charlton Abbot's does not seem to have been ascertained; but, in spite of their ruinous condition, it is tolerably clear that the roofs had been formed of thin slabs of stone, which had been coved over so as form a rude arch, like that previously referred to as found in some of the central avenues and chambers.[d]

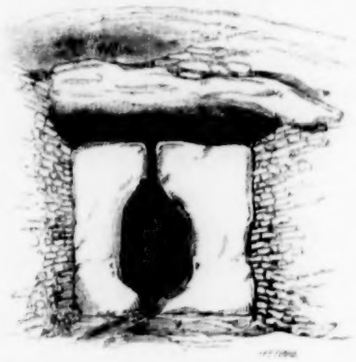


Fig. 12. Entrance to Chamber on the North Side of Barrow at Rodmarton.

Type III. Cists in place of Chambers (Plate XIV. fig. 3).—This third type of chambered barrows can only be classed as chambered, from its close relationship and clearly contemporary origin with those already described. Instead of *chambers*, properly so termed, entered from one end, they contain graves built up with stone slabs—vaults or cists—much too shallow to have been approached in that manner; and which could only have been used for successive interments, if so

[a] T. D. Fosbroke, F.S.A. *Encycl. Antiq.* 1843, pp. 544, 547. In the Nempnet barrow there was "a perforated stone shutting up the avenue between the unmortared walls,"—another variety of the *tolmen* entrance.

[b] From *Proc. Soc. Antiq.* 2 S. ii. 277.

[c] A similar method for entering the chambers is described by the Rev. W. C. Lukis in two parts of the chambered barrow at Kerlescant, in Britany. Here Mr. Lukis thinks that the hollows in the stones which, placed side by side, form the oval entrance holes, just large enough for a person to creep through (2ft. × 1ft. 8in. and 3ft. × 1ft. 6in.), are not natural, but formed by cutting away the edges of two contiguous props. See his paper "On a Chambered Long Barrow at Kerlescant, in Britany," *Journ. Brit. Arch. Assoc.* 1868, xxiv. 40, Plates 2, 3.

[d] *Mem. Anthrop. Soc.* i. 475; *Proc. Soc. Antiq.* 2 S. iii. 278.

intended, by lifting the flat covering stones. In the long barrow at Littleton Drew (No. 1), there were four cists of this description, arranged along the south side of the mound, none of which much exceeded two feet in depth. Cists such as these are evidently not *chambers*, and the barrow containing them can only be termed chambered from its analogy in other respects to those properly so designated, of which analogy and generic resemblance there can be no doubt. Now and then it is difficult at first sight to say whether the stone structure in some particular barrow is a cist or a chamber; as is seen in that of Avening, in which there are two chambers, one of them well marked, and a third cell or vault, more correctly regarded as a cist, capable only of being used from above. Other examples of this less perfect type of chambered barrows are found in the ruined mounds of Lanhill (No. 2), Luckington (No. 3), Monkton "Millbarrow" (No. 4), and Oldbury (No. 11), all in Wiltshire; and in that of Duntesbourne Abbot's (No. 21), in Gloucestershire.

Sculptured Stones.—In no instance, I believe, have the stones forming the walls of our chambered tumuli presented any trace of sculpturings such as are so frequently met with in the more or less analogous megalithic tombs of Scotland, Ireland, and Britany. It is no doubt true, as observed by Sir J. Y. Simpson, that their walls, in many cases at least, have not been examined with the care necessary for the discovery of such markings.[a] In those, however, which have been explored since the attention of antiquaries has been directed to this subject, it is probable that none exist.

Monoliths or Triliths at the Broad End of Chambered Barrows.—In the two last-described types of chambered barrows, in which either chambers proper or cists are found only near the base or skirt of the mound, and in which there could have been no need of an entrance to the interior, the inclosing wall is nevertheless found to curve inwards at the broad end of the tumulus, in the ace-of-hearts form, previously described. At the spot where the curve ends, in place of an entrance formed by two stones placed on end bridged over by a third, we meet with large stones placed in various fashions, never in two cases the same; sometimes a monolith, sometimes two standing stones with a third resting against, or it may be wedged in between them. In the fine chambered tumulus at Ablington (No. 18) there is a double or concentric range of dry walling inclosing the base, which, at the broad end, makes the usual double curve inwards. Exactly at the point where these curves meet there is a large upright oval stone six feet

[a] *Archaic Sculpturings of Cups, Circles, &c.* 1867, p. 136. *Proc. Soc. Ant. Scot.* App. vi. 119.

high and five wide, standing on a second natural block, perforated in the manner often found in the Cotteswolds, and by which it is steadied and kept in place. On the long barrow, as yet it is believed unexcavated, at Gatcombe is a massive monolith at the broad end, known as "Tingle stone." Such a stone is also figured by Aubrey as in his time standing "at the great end" of one of two long barrows at Leighterton, perhaps that opened not long afterwards by Mr. M. Huntley.[a]



Fig. 13. Monolith, heart-shaped curves of double walling, and pyramidal piling in Long Barrow, Ablington.

Another on the barrow at Duntesbourne Abbot's is or was called "the hoar stone."[b] Single standing stones of this description, if, as probable, intended to be seen on or near the summit of the barrow, were most likely simple *stelæ*—monumental stones or pillars—analogous to the head-stones on modern graves. Sometimes, however, in place of one there are three stones in this position. At Littleton Drew (No. 1), are two standing stones six and a half feet apart, and about the same in height above the surface, and leaning against their western edges is a third very large flat stone twelve feet in length by six in breadth. These stones give a name to the field in which the tumulus is situated, "The Three-stone Field."

Campus ab illis
Dicitur, æternumque tenet per sæcula nomen.

Two centuries ago they occupied the same position as at present, and it was supposed by Aubrey that the large flat stone had originally rested on the summits of the two uprights, aided by two others which had been removed.

[a] Aubrey, *Mon. Brit.* (MS. Bodl.) Under the head of "Sepulchres," Aubrey here gives rude sketches of several of the chambered long barrows of Wiltshire and Gloucestershire. (Comp. *Wilts Arch. Mag.* vii. 322.) They are chiefly interesting as showing the progressive spoliation in the course of two centuries of these curious monuments. Nearly the same may be said of the three or four sketches by Stukeley of some of the same tumuli in his "*Celtic Sepulchral Monuments at Abury*," reproduced in Plate XII. 3, 4, 5. In the margin we give (by permission of the Rev. S. Lysons, F.S.A.) a small cut of the Ablington monolith.



Fig. 14. Monolith supported by holed stone, Ablington.

[b] For the στήλη, or pillar-stone, as the usual accompaniment of the sepulchral tumulus among the ancient Greeks, see the tomb of Elpenor in Homer, *Odyss.* xii. 14. Comp. *Iliad*, xi. 371; xvi. 457; xvii. 434.

According to such a view this trilith was either a fallen "cromlech"[a] or a ruined chamber. Subsequent researches, however, in the long barrows render this latter opinion improbable. Mr. Lysons in 1863, in excavating the chambered barrow at Rodmarton, found buried beneath the soil at the east end three large stones arranged somewhat similarly to those in the Littleton Drew barrow, and so supported and fenced in by three walls of horizontal masonry that the notion of their ever having occupied any other position cannot be entertained.[b]



Fig. 15. Stones in Barrow at Rodmarton, as seen from the north-east.



16. The same stones, as seen from the west.

In this case the large table-stone occupied a sloping position and rested against the east, not, as at Littleton Drew, against the western edges of the two uprights. This may perhaps suggest the question whether the table-stone at Littleton Drew may not, centuries ago, have been removed from the eastern to the western side of the standing stones; or it may have originally rested upon them and have slipped down from its supports, as explained lower down.

It has sometimes been argued that stones such as we are considering are really the remains of sepulchral chambers, denuded of the earth and rubble by which they were covered. This is possible, but not very likely, where cists or chambers, obviously sepulchral and containing numerous human skeletons, are found in other parts of the same tumulus. The stones on the ruinous barrows at Temple Farm (No. 8) and at Rockley (No. 9) may perhaps be justly regarded as the remains of sepulchral chambers, but not so those at Littleton Drew. Sir R. C. Hoare, after a partial exploration of that barrow, concluded indeed by stating that no doubt the primary interment was placed "beneath the huge superimpending stones at the east end."[c] In reference to this suggestion, I had great

[a] In the Ordnance Map, sheets xxxiv and xxxv, several of the chambered barrows of Gloucestershire and North Wiltshire, those of Littleton Drew and Luckington amongst the number, are laid down as "tumulus with cromlech." See the lithographic plate of the "Tumulus with fallen Cromlech at Littleton Drew," in *Cran. Brit.* pl. 24, XXV.; and *Wilts. Arch. Mag.* iii. 164.

[b] The woodcuts in the text, showing the exact relation of these stones, have been lent by the Rev. S. Lysons from *Our British Ancestors*, pp. 138, 139. Another view will be found in *Proc. Soc. Antiq.* 2 S. ii. 276.

[c] *Gents. Mag.* Feb. 1822, xcii. 160. It must be remembered that the cists full of skeletons had not been discovered when Sir Richard wrote, nor, indeed, until thirty-three years later.

pleasure, at Mr. Scrope's request, in assisting in an excavation at the foot of these stones, when they were carefully dug round on all sides, to the very base of the barrow, without finding a trace of human remains. The only objects met with, not entirely superficial, were fragments of the bones and teeth of swine, including the tusks of boars, and two or three rude flakes of flint, not indigenous to this district. At Rodmarton, where the intact condition of the curious trilith or, as many would call it, "cromlech," cannot be gainsaid, there was not a trace of human remains in its vicinity, but beneath and in front of the sloping incumbent stone were many bones and teeth of oxen and horses and the tusks of boars. There were likewise distinct traces of fire at this part of the base of the barrow, there being a not inconsiderable deposit of fine charcoal, and the colour of the stone rubble being changed in some places to a blackish grey, and in others to a reddish colour. Mr. Lysons believes that these stones formed "the altar upon which the victims were offered up."[a] It might perhaps be difficult to disprove such an opinion; but my own impression, after two visits to the tumulus whilst the excavations were in progress, was to the effect that the stones "formed a monument rather than part of the tomb properly so called," or were "a place where certain funeral rites were performed and the sacrifices of the dead eaten."[b] To this latter opinion I still incline, more especially as it must be doubtful whether in the originally complete state of the tumulus the stones were above ground and exposed in such a way as could constitute them a monument.

There is, as has been shown, a great variety in the mode of construction, and if we may so term it the architecture, of these chambered tumuli. No two are precisely similar; but, whilst the principles of construction are the same, the diversity in the details is very remarkable. Of all yet examined, that at Charlton Abbot's most agrees nearly with that at Rodmarton in its two external side chambers, and in its megalithic erection at the principal and broad end. In this instance we have no longer a *monolith* as at Ablington, or a mere *trilith* as at Littleton Drew and Rodmarton, but triple stones with a fourth large incumbent stone resting upon them—in fact a *tetralith*. Occupying the position of the entrance in tumuli with central avenues and chambers, there was a massive slab standing edge-wise between two columns or pillar stones, in the form (as to the ground-plan) of the



Fig. 17. Tetralith at Charlton Abbot's (the large stones 8ft. high).

[a] *Our British Ancestors*, p. 140.

[b] *Crania Britannica*, Description of Skull from Rodmarton, Plate 59, XXVII. p. (2).

Roman capital letter ⊨, but with the cross-bar disproportionately long.[a] Resting on the two pillars, and on the slate-like stones of which the bulk of the tumulus is formed, was a fourth still larger stone, a slab, nearly eight feet square and two feet thick.[b] On this stone, among the slaty rubble, was a large human lower jaw of the massive proportions which belong to the British brachycephalous type, but without a trace of any other bone near it. On raising the horizontal stone there were found immediately below it the remains of five children, from less than one to about seven years of age, every bone of the five skeletons distinguishable, though more or less warped and distorted.[c] With these were the detached skull and jaw of a young man of about 18 years, unaccompanied by any other part of the skeleton.[d] The cranial type of the children, probably brothers and sisters, could not be ascertained, but that of the young man was unquestionably brachycephalous (·79), differing entirely from the very elongate form of the numerous skulls from the sepulchral chambers of this tumulus, of which fifteen were capable of being measured. Near these human remains were many bones and teeth of horses and swine, with several flakes of flint, one of which has a delicately serrated edge; and there were two or three fragments of coarse pottery. It appears most probable that the human bones in this part of the tumulus were those of victims of an alien race sacrificed to the *manes* of the dead interred in the principal chambers.[e]

These facts must speak for themselves. There is no question as to sacrifices by fire, which have been generally thought to be implied when any appearances

[a] A trilith arranged in precisely the same fashion was found on excavating the broad east end of the ruinous chambered barrow at Lanhill near Chippenham (No. 2), *Wilts. Arch. Mag.* iii. 68. Possibly in this case there was originally an incumbent stone which had been removed.

[b] The trilith at Littleton Drew was probably of the same character as this at Charlton Abbots. The two pillar stones remain; the stone which may have stood edgewise between them has disappeared, whilst the large slab, resting originally on the two pillars, having been undermined by the removal of the stone-like rubble, has slipped down behind them. There can be little doubt that these changes in the position of the stones were effected by the mound-breakers of a distant age, by whom the large stones were naturally mistaken for the entrance to a sepulchral chamber.

[c] The bones of these five infantile skeletons were examined and classified with great care by Mr. L. Winterbotham, M.R.C.S., of Cheltenham.

[d] Had the decapitated trunk been left on the battle field, or had it served for the gratification of anthropophagous tastes? The five children's skeletons seem pretty clearly indicative of infanticide; they were, perhaps, the children of an aggressive enemy of the encroaching Belgic tribe.

[e] *Memoirs Anthrop. Soc.* i. 474. *Proc. Soc. Antiq.* 2 S. iii. 275. There were no traces of burning or of charcoal near these four stones, as around the corresponding stones at Rodmarton. At some distance from them, however, and near the centre of the tumulus, a broken circle of stones, having a diameter of about seven feet was discovered. The soil all around was deeply impregnated with wood ashes, but no other remains were found near it.

are adduced in favour of particular megalithic structures being devoted to rites of a sacrificial or other religious character.[a]

Analogy of Chambered Tumuli with the Huts of Esquimaux.—The surprising similarity between the winter huts of the Esquimaux and the chambered tumuli of Sweden and Denmark has been pointed out by Professor Nilsson.[b] The two, in fact, are almost identical. The analogy is not in every respect so exact with the tombs which are here under consideration, but even in these the general principle of construction is the same. The huts of the Esquimaux have on the sunny side a narrow entrance-passage, so low that one must crawl through it to get in. So it is with our chambered tumuli; though all of them do not, like those of Scandinavia, present a distinct and separate gallery of approach. However, where this is wanting, the doorways are still so low as to enforce the crawling posture, and the central galleries and chambers are seldom high enough to allow of the erect position. On the principle that among rude nations the dwellings of the living and the sepulchres of the dead generally resemble each other, Nilsson infers that the houses of the people who erected the chambered tombs of the North must have been almost a counterpart of the latter, and as such they closely resembled the huts of the Esquimaux. Indeed, he believes that the remains of such dwellings have been discovered. In North Britain and its islands the structures called "Picts' houses" correspond so far with the chambered tumuli of the same district that in particular instances it has been doubted whether the structure uncovered by the antiquary was a dwelling or a tomb.[c] The Clochán of Ireland are analogous to the Picts' houses in their general arrangement. The people by whom the chambered barrows of South Britain were erected may during a great part of the year have been the inhabitants of caves and other subterranean abodes. Near the chambered tumulus at Ablington there were formerly several underground circular dwellings, one of which still remains, furnished with recesses and seats, which can hardly be regarded as other

[a] As by Mr. H. Harrod, F.S.A., *Proc. Soc. Antiq.* 2 S. ii. 311. I have not space here to enter into the vexed question as to the distinction between the *Cromlech* and the *Kistvaen* or subterraneous chamber. Sir R. C. Hoare repeatedly insists on the essential differences in the two structures; but these have been of late years more satisfactorily illustrated by Sir Gardner Wilkinson, *Journ. Brit. Arch. Assoc.* xvi. 116; xvii. 47; and by Mr. Du Noyer, *Proceedings Kilkenny Arch. Soc.* N. S. v. 474, 496. The opposite view respecting these megaliths held by the Rev. W. C. Lukis, F.S.A. is maintained by that zealous explorer, in a contribution to the same journal, p. 492.

[b] *Primitive Inhabitants*, &c. 132, 152, pl. xiv. fig. 246, compared with fig. 243. Compare Lubbock, *Pre-historic Times*, p. 88.

[c] The entrance to "Picts' houses" is generally by a long passage often less than two feet wide and three feet high. *Archæologia*, xxxiv. 127.

than the abodes of the very people by whom the barrow itself was constructed. Habits of life of this description were probably continued far into the round-barrow period, as appears from what Diodorus tells us of the subterranean repositories for corn among the Britons.[a] Tacitus says the same of the ancient Germans, adding that the people took up their abode in them during the cold of winter.[b]

A curious confirmation of the troglodytic habits of the builders of the chambered barrows appears to be afforded by the discovery in several of them[c] of human cervical and dorsal vertebræ united by ossification, in a manner which must have resulted either from disease or injury.[d] It is not improbable that this anchylosed condition is the result of injuries received in the entrance to and exit from dwellings capable only of being entered on all-fours. The head and neck would be very much exposed to violent concussions against the sides and roofs of the low and narrow passages and doorways, and vertebral anchylosis would by no means be an unlikely result.

Mode of Burial.—The method of burial in this remarkable class of primeval tombs is by the inhumation of the entire body, to the exclusion, almost absolute, of its cremation. The unchambered long barrows have with great probability been shown to be the tombs of chieftains, in whose honour slaves and dependants, perhaps even wives and children, have been immolated. Such likewise, it would appear, was the case with the chambered long barrows, although, from their adaptation to successive interments, there is greater reason for the conclusion that they were in many cases family tombs or *mausolea*, and that they may even have been used as such by successive generations. From the fact of their having been so frequently rifled by treasure-seekers and others, the discovery of a tumulus with its contents undisturbed is a circumstance of the greatest rarity; and I am only able to refer to a single example, viz., the northern chamber at Rodmarton.[e] The chambers at Charlton Abbot's had been disarranged by the falling-in of the roofs; whilst at Stoney Littleton, Uley, and West Kennet, though the human

[a] Diod. Sic. v. 21.

[b] Tacitus, *Germania*, 16. "Subterranei specus, suffugium hiemi." See also what Virgil says of other Northern nations, *Georgic* iii. 376.

[c] In at least four (Table 2, Nos. 13, 14, 15, 16). I have likewise met with it in the unchambered long barrows of Fyfield (Table 1, No. 19). The cave or pit-dwellings discovered at Highfield, near Salisbury, in 1866, may have been the abode of the people by whom some of our Wiltshire long barrows were erected.

[d] This peculiar morbid condition of vertebræ from the long barrows is described in *Further Researches and Observations on the Two Principal Forms of Ancient British Skulls*, p. 33, *Mem. Anthrop. Soc.* iii. 73.

[e] The proof of not having been previously disturbed is finding the chambers free from earth and rubble, with which they are necessarily filled when they have once been opened by raising the covering stones, the usual method with treasure-seekers, who were ignorant of their actual construction, and of the position of their entrances.

remains were left behind, there was sufficient proof of the interior having been ransacked by tomb-breakers, intent on anything rather than the advancement of knowledge. It is only when examined by those more or less acquainted with anatomy that the original position of the bodies has been satisfactorily made out. A comparison of the imperfect notices we possess as to the position of the bones shows that the bodies had in general been placed round the sides of the tombs, in a sitting or crouching posture, or otherwise reclining in the same contracted position on the floor. In the chamber at Rodmarton, measuring about seven by five feet in superficial area and five feet high, and undisturbed unless by burrowing animals, foxes or rats, there were the remains of as many as thirteen bodies, as to which this description seems applicable. In the still smaller eastern chamber at Charlton Abbot's there were twelve skeletons, representing as many bodies, which, Mr. Winterbotham tells us, "must have originally been placed squatting on flat stones round the walls." In the western chamber there were the remains of fourteen bodies. At West Kennet, in a chamber of larger proportions (9 × 8 × 7·75 feet), the remains of six skeletons only were found, the original position of which must have been very similar. In the principal chamber at Avening there were eight, and in the lesser one three skeletons; and Mr. Fosbrooke tells us that the bodies had been "placed in a sitting posture, with the feet crowded together." At Uley, too, the same crouched position against the walls, at least in one instance, was noticed. The observations of the Danish and Swedish antiquaries show clearly that a similar disposition of the bodies obtained in the chambered barrows of Scandinavia.[a]

Cremation.—Burnt human bones, limited in amount, have been found in a few chambered long barrows, though under circumstances which seem to preclude the idea of cremation having been pra tised as part of the funeral rites. At Stoney Littleton Sir Richard Hoare tells us that in one of the chambers there

[a] See the remarks of M. Boye as to the Giant's Chamber of Magleby, in the Isle of Möen (*Annaler for Nordisk Oldkyndighed*, 1858, p. 202, and Sir John Lubbock, *Prehistoric Times*, p. 106), and as to that of Hammer, in Zealand, *Annaler*, 1862, and *Proceedings Soc. Antiq.* 2 S. iii. 310. "Some of the corpses appeared to have been buried in a sitting posture along the side stones, and others extended on the bottom." See also Nilsson's *Primitive Inhabitants of Scandinavia*, by Sir J. Lubbock, p. 128. M. Boye, however, suggests that the confused state of the bones favours the opinion that the chambered tumulus of Hammer was, in fact, an *ossuary*, destined to receive, not the entire bodies, but only the bones after the flesh had decayed from them. The same view is entertained by Prof. Hildebrand in regard to two chambered tumuli, one at Luttra, the other at Slöta, in Sweden, and both of which, he thinks, were *ossuaries*. These opinions are strongly contested by Prof. Nilsson (*Primitive Inhabitants, &c.* Eng. ed. 160—168); and the usually received view that the bodies were interred entire derives further confirmation from the report, in regard to Luttra, of Prof. Hildebrand's own colleague, the distinguished anatomist, Baron von Düben. See *Antiquar Tidskrift för Sverige*, i. 279.

"were fragments of an earthen vessel with burnt bones," and he was of opinion there was proof "that the two systems of burial were here adopted, the interment of the body entire and cremation." It must, however, be remembered that, though described by Sir Richard, the examination of the tumulus was conducted by the Rev. J. Skinner of Camerton. In the MS. letters of this gentleman, preserved at the Literary and Scientific Institution of Bath, Mr. Skinner, in describing the excavation, writes, "In the chamber marked C we met with some pieces of an unbaked clay urn, formed of very coarse materials, and a few burnt bones lying contiguous." It may fairly be doubted whether the facts, as here narrated, afford sufficient proof that cremation had been practised as a contemporary sepulchral rite; they are certainly inadequate to establish the practice of urn-burial. At Uley, after a minute inspection of every fragment, I was able to say distinctly that "*none* of the bones had been burnt;" neither was there the slightest trace of cremation at Littleton Drew or at West Kennet. At Charlton Abbot's, in an isolated portion of the tumulus, and therefore possibly a secondary interment, portions of a human skull and some bones of a boar were found, which are doubtfully stated to have presented "marks of cremation." The association is suggestive of a comestible rather than a mere sepulchral rite; and at all events there is no proof of the practice of cremation at the time of the erection of the chambers. In the ruined and rifled chambers at Nympsfield there were "several fragments of burnt human bones, the largest being part of the occiput of a child." These I very carefully examined, and reported of them that "they were very imperfectly burnt, many of them merely charred, and that they were very different from the cinders of bone which are found when unambiguous cremation has been practised."[a] In the chambers at Rodmarton, again, there were similar ambiguous appearances, "some indications," says Mr. Lysons, "of fire upon a very small portion of the bones." Those sent to me were mere fragments, and I wrote of them at the time that they were "very imperfectly incinerated, and some of them merely charred."[b]

In none of the cases referred to are the appearances presented by the burnt bones, or the quantity of them, such as would justify the assumption that even one body had been reduced to ashes by cremation.[c] We are thus driven to search

[a] Dr. Bird says that the burnt bones were in a separate cist on the north side of the chamber, which did not seem to have been opened before, *Journ. Anthrop. Soc.* iii. lxii. If so, this does not appear in Prof. Buckman's report.

[b] *Crania Brit.* Description of Skull, pl. 59, xxvii. p. (3).

[c] In the chambered barrow at Fontenay, near Caen (*ante*, p 214, note), there were human bones imperfectly burnt scattered amongst the skeletons

for some other explanation. In his description of the chambered barrow at Hammer, in Zealand, M. Wilhelm Boye notices the burnt osseous fragments, and the scorching of the flint-stones, by a fire having been made in the chamber on the occasion of successive interments, for the purpose, as he thinks, of purifying it from the close and pestilent air with which it must have been filled—a mode of proceeding used, it is said, by many uncivilised tribes.[a] Further observations may be desirable before this explanation can be regarded as established; but for the present it is perhaps as probable as any which can be suggested.

Cleft Skulls.—In the year 1855, in one of the cists of the chambered barrow at Littleton Drew, I first observed portions of a skull, of which "the fractured edges were very sharp, suggesting the idea of having been cleft during life."[b] I afterwards found that fragments obtained in the preceding year, on the re-examination of the chambers of the Uley tumulus, presented the same appearance. The evidence of cleavage in two out of the six skulls obtained from the West Kennet chamber in 1859 was still more unmistakeable, and served to fix my attention on the questions growing out of it. Such cleft skulls have since been met with in the great majority of the long barrows, both chambered and unchambered, which I have had the opportunity of examining. At Rodmarton, four of the thirteen skulls, being those of men from twenty to fifty years of age, had evidently been cleft in this peculiar fashion. The chambered barrows of Nympsfield and Charlton Abbot's are the

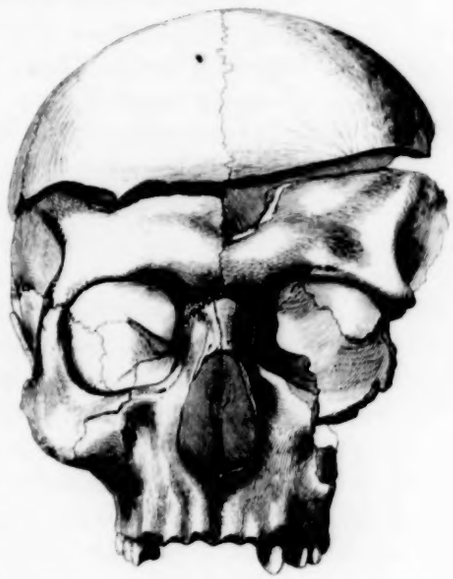


Fig. 18. Cleft Skull from Chambered Barrow, Rodmarton. Scale, half-linear.

[a] *Proceedings Soc. Antiq.* 2 S. iii. 315, 316. Professor Nilsson, writing of the chambered tombs of Sweden, says that no traces of burnt human bones have ever been found in them, *loc. cit.* p. 146. On the other hand, Mr. F. C. Lukis, F.S.A., in describing the contents of the large chambered tumulus at L'Ancresse, in Guernsey, expresses the opinion that "the bones were, from their position, brought to their final resting-place after the flesh had been removed by *burning* or some other means," *Arch. Journal*, 1845, vol. i. p 149.

[b] *Crania Britan.* Description of Skull, pl. 24, xxv. p. (3). *Wilts. Arch. Mag.* 1856, iii. 173.

only instances, the human remains from which I have had an opportunity of examining, in which there have been found no traces of violent cleavage of the cranial bones, such as might have resulted from the forcible blow of a club or stone axe.

We need not again enter on the questions connected with this cleft condition of the skulls,—viz. those of human sacrifice and anthropophagism,—as these are sufficiently dwelt on in the preceding part of this memoir.

Remains of Funeral Feasts; Bones of the Wild Boar and other Animals.—In about half of the chambered long barrows of this part of England, and in nearly all of the opening of which there is any record, the bones and teeth of animals, chiefly those still used for food, have been met with in considerable numbers. Such bones are found either in the chambers themselves, at the foot of the standing stones at the broad end, or more scattered, though still at a considerable depth in the mound itself. They are those of the swine, probably the wild boar, the red-deer and roebuck, ox, goat, horse, and dog. The remains of rats, mice, rabbits, foxes, polecats, and badgers, all of which are occasionally met with, may be disregarded as those of animals whose burrowing propensities lead them to infest these tumuli. As compared with the unchambered long barrows, these chambered mounds show a comparative infrequency of the remains of *Bos longifrons* and *Cervus Elaphus*; whilst those of the wild boar (*Sus Scrofa ferus*) are much more abundant. From this we may perhaps infer that this species infested and prevailed extensively in the Cotteswolds and the adjacent valleys of the Severn and Upper Thames; whilst the red deer may have found its principal haunts in the valleys of the two Avons, the Wily, and the Nadder, rivers of central and southern Wiltshire.[a] At the entrance to the Uley chamber, the lower jaws of several wild boars were met with, to the exclusion curiously of other bones. Some of the tusks are still preserved and are of great size. The fragment of one, obtained by myself, had been cut and perforated for suspension, perhaps as an implement, or as a trophy or amulet. Bones and teeth of swine, including large tusks of boars, were obtained from the chambers of Littleton Drew, West Kennet, Nympsfield, Rodmarton, and Woodchester. The bones of ruminants, chiefly

[a] In the twelfth century Henry of Huntingdon, enumerating the praises of Britain, quotes the line—

"Salisbury for the chase renowned;"

confirmed in the next century by our earliest poet, Robert of Gloucester, who says—

"Most chase of wild beast about Salisbury, I wis."

The red deer has only become extinct in the neighbouring New Forest in our own times.

those of a small ox, probably *Bos longifrons*, though in small numbers, were found at Lanhill, West Kennet, Nempnet, Uley, Nympsfield, Rodmarton, Woodchester, and Nether Swell, and probably also at Avening. The Rev. W. C. Lukis presented to the Museum of the Wilts Archæological Society, at Devizes, the very large horn-core of an ox, possibly *Bos primigenius*, from some excavations made by him in the chambered long barrow at Tidcombe, in North Wilts (No. 10). The barrow however had been previously rifled, and it is doubtful whether or not this horn-core is of a period coeval with or subsequent to its erection. From the barrow at West Kennet were obtained some of the bones of a goat. From that of Nempnet the teeth of the red-deer; and from West Kennet and Charlton Abbot's bones of the roebuck. At Nempnet, Rodmarton, Charlton Abbot's, and Woodchester were many teeth, if not likewise the bones, of horses. At both Nympsfield and Woodchester bones of the dog were found, but, the exact position not being recorded, it may be doubtful how far they were contemporary with the tumuli in which they occurred. Nympsfield is the only chambered barrow in which the discovery of the bones of birds is recorded.

Implements of Flint and other Stone, and of Bone.—The paucity of manufactured objects of all descriptions in the chambered barrows is very remarkable, but may in part be explained by their having been so generally rifled. This may modify but does not altogether invalidate the conclusion naturally arising from the fact that in no instance whatever has any object of metal been found in the chambers, or at such a depth in the mound as not clearly to indicate a secondary or accidental deposit. It may not excite surprise that at West Kennet, in the heart of the chalk formation, the excavation of the chamber should have yielded so large a number of flint knives and scrapers, and of flakes capable of adaptation to such purposes; and that there should have been two or three large flint and sarsen stones evidently intended to have been used for hammering and pounding with the hand. As this chamber had undoubtedly been rifled, and perhaps even utilised as a dwelling, it is doubtful how far the flints found in it were contemporary with the original interments which had been suffered to remain. From its proximity to the skull of what appeared to have been the principal occupant of the tomb, the curious flint-scraper or knife here figured, with short projecting stem and edges finely chipped, may may probably be regarded as coeval. Flint flakes, no doubt employed as cutting implements, and in two or three instances with delicately serrated edges, were found in the chambered barrows of the oolite region, many miles distant from



Fig. 19. Flint Scraper with Stem. West Kennet.

the flint-beds of the chalk. Such was the case at Lanhill, Littleton Drew, Uley, Nympsfield, Rodmarton, Charlton Abbot's, Ablington, and Nether Swell, in most instances either in or quite close to the sepulchral chambers. Under the left hand of the skeleton, forming the central primary interment at Littleton Drew, was a beautifully delicate flint flake, about an inch and a half in length, with a very fine



Fig. 20. Flint Flake, from Interment at Littleton Drew.

point, and which had evidently been selected for its fitness for piercing or cutting. "It was," says Sir Richard Hoare, "too thin for an arrow-head, but might have served for a lancet."[a]

At Walker Hill (No. 7) I picked up among what seemed to be the *débris* of the chamber, a finely chipped leaf-shaped arrow-head of flint (fig. 21); and two others (figs. 22 and 23) of more elegant proportions were found in the undis-



Fig. 21. Fig. 22. Fig. 23.

Leaf-shaped Arrow-heads of Flint from Chambered Long Barrows.

turbed chamber at Rodmarton. Another and finer specimen, as stated in the previous part of this memoir (*see* fig. 3, *ante*), was obtained from the unchambered long barrow at Fyfield; so that many specimens of this particular type of arrow-head may, with great probability, be referred to the long-barrow period.[b] It is curious

[a] This woodcut, as well as several others in these papers, is reproduced, through the kindness of Dr. J. Barnard Davis, from the pages of *Crania Britannica*.

[b] See *Proc. Soc. Antiq.* 2 S. iii. 168. In this paper, at p. 171, note ([b]), for "Roman Barrow" read "round Barrow."

that in every instance the points of these arrow-heads were broken off when found, and that, with the exception of that from the unchambered long barrow at Fyfield, the tang-end was also wanting.[a] Of polished stone implements there has been a singular scarcity: but two stone axe-heads, partially polished, were met with in such proximity to the Uley chambered tumulus that they can hardly have done otherwise than have belonged to its builders. One is of flint, the other of a hard green stone. They each measure four inches in length by two in breadth. They are preserved in the museum of Guy's Hospital.

A very few implements of bone have been met with. At West Kennet there was a rude bone pin; at Woodchester a scoop, or gouge-shaped chisel, made out of the shank-bone of a horse; at Charlton Abbot's part of a rudely finished implement of bone, of concavo-convex form, with two perforations at one end; whilst from the ruined chamber of Temple Farm (No. 8) Mr. Lukis obtained a chisel of bone, with a sharp and well-formed cutting edge. Of this object, preserved in the museum of the Wiltshire Archæological Society, a wood-cut has been given.[b]

Pottery.—The instances are rare in which fictile vessels, or even fragments of such, have been found in the chambered barrows. Passing over the notice by the old Gloucestershire historian of the discovery of "an earthen urn" at the entrance of each of the three "vaults" in the Leighterton barrow, and which differs from anything met with in the course of modern excavations, we next come to Mr. Skinner's notice of the "pieces of an unbaked clay urn of very coarse material" in one of the side-chambers at Stoney Littleton. At the bottom of the chamber at West Kennet we found piles of fragments of ancient British pottery, of very various descriptions, many of them highly ornamented, and, as would appear, portions of *food-vases*, like those of the round-barrow period. As, however, I have pointed out, these must have been deposited in the form of shards; and "whence the fragments came, and why here deposited, must be matter of conjecture."[c] It is, indeed, a very doubtful question whether they belong to the people by whom the chamber was erected, and whose skeletons were found within

[a] No flint arrow-head with separate tang and barbs has been found in any English long-barrow; but M. Boye describes one with a tang from the chambered barrow at Hammer, in Denmark (*Proc. Soc. Antiq.* 2 S. iii. 312); and Mr. Lukis obtained two with both tang and barbs from the chambered tumulus at Kerlescant, in Britany. (*Journ. Brit. Arch. Assoc.* xxiv. 43, pl. 4, figs. 2, 3.) What is true of one district or country in respect of these monuments is not necessarily so of another.

[b] See *Proc. Soc. Antiq.* 2 S. iii. 215.

[c] *Archæologia*, xxxviii. 417, where see woodcuts of several of the fragments of pottery.

it. Rather, perhaps, it may be surmised that whilst the tumulus was that of the primeval long-headed people, the fragments of pottery belonged to their successors the brachycephalous Belgæ, by whom the tomb may have been searched for treasure, and by whom, in accordance with some superstitious custom unknown to us, these fragments of pottery may have been piled up.[a] In the ruined chamber at Nympsfield two bits of coarse pottery were found, one of which was "scored with the impressed marks so common in ancient British *fictilia*." In the intact Rodmarton chamber, "the *débris* of a vessel of very coarse pottery, nearly black," were met with. This I regard as the most important find of pottery yet made in the chambered long barrows of this district. On comparison with others found in the unchambered long barrows of South Wilts, including the vase nearly perfect from that of Norton Bavant, figured in the former part of this communication (*see* fig. 4 *ante*), the identity of the fabric is evident, and the two may be regarded as contemporary pottery, the product of the people by whom the long barrows of these districts were erected. Scattered coarse fictile fragments, almost black, and glistening with white pounded shells, were likewise found in the chambered barrow at Nether Swell. Some of these were of a very unusual rolled form, almost precisely resembling a cigar.[b]

Comparison with Objects found in Chambered Barrows of Denmark and Britany.—The paucity of objects of manufacture in our English chambered barrows, whether fictile vessels or implements and weapons of stone or bone, is the more to be remarked, as in those both of Denmark and Britany, which on every ground must be referred to the same neolithic or polished stone period, both the stone implements and the earthen vases are often very considerable. For Denmark, it will suffice to refer to the chambered tumulus at Magleby, in the Isle of Möen, and to that at Hammer, in Zealand, both described by M. Wilhelm Boye, and previously referred to in this paper.[c] In the former, containing perhaps ten skeletons, were no fewer than twenty urns, decorated with points and lines;

[a] Since the above was written, it has been suggested by Mr. Albert Way (*Arch. Camb.* 3 S. xiv. 284), that the chamber in the West Kennet tumulus had been appropriated as a dwelling-place by the living. This, I think, is not at all improbable, and is not inconsistent with the view in the text.

[b] The pottery from the chambered barrows of Britany is of a decorated character, and to some extent resembles that from our round barrows, if we may judge from the figures in *Revue Archéolog.* 1865, n. s. xi. and from those given by Mr. Lukis, *Journ. Brit. Arch. Assoc.* xxiv. 43, pl. 5. A basin-form, however, seems to be prevalent.

[c] *Annaler for Nordisk Oldkyndighed*, 1858, p. 202, and 1862, published 1864. For Magleby, see likewise Sir J. Lubbock, *Prehistoric Times*, pp. 75, 103, figs. 86, 101—103; and for Hammer, *Proceedings Soc. Antiq.* 2 S. iii. 308, where is a ground-plan of the tumulus.

six spear-heads; three small chisels; one beautiful axe, never used; and fifty-three flakes, all of flint. There were likewise fifty beads of amber, of ring, tubular, or hammer shape. The stone implements, beautifully formed, are in Sir John Lubbock's collection. In the chambered tumulus at Hammer, containing a large but uncertain number of skeletons, were a great number of urns, mostly broken. Some were of the flower-pot shape, others bowls or jugs, and some vessels to be hung up. They were generally ornamented with markings scratched, pressed, or engraved in the clay. The flint implements and weapons were very abundant. There were seven chisels; fifteen flat wedges of different forms, five of them very massive, and probably used for cutting trees; two lance-heads; one arrow-head; and fifty-five implements of uncertain use, more than half common flakes, but the rest more or less finely chipped at the edges. There was one beautiful, finely-polished battle-axe of green stone, with a hole for the handle. As ornaments for the person were a number of beads of amber, of the same form as those in the Magleby tumulus.

Several of the chambered barrows of Britany, some of which are long, and some circular, have been excavated of late years, and have yielded numerous polished stone axes and fine vases of pottery, which may be seen in the museums of Vannes and other towns in that part of France. The productiveness of these tombs, as contrasted with the poverty of our own chambered barrows in such objects, is indeed very remarkable. Two examples may here be adduced, viz. that of the great circular barrow called "The Tumiac," explored in 1853; and the chambered long barrow of Mont St. Michel, at Carnac, the excavation of which took place in 1862. In the entrance to the chamber of the Tumiac were as many as thirty polished stone axes, most of them of imported materials, as Asiatic jade, or hard tremolite. Many of these implements appear to have been purposely broken before being deposited. There were about three hundred beads, chiefly of jasper, though a few were of agate and crystal. They were of various forms, and were deposited in three groups, supposed from their position to be for the neck, waist, and wrist of the wearer. There were traces only of a single skeleton.*

The chamber of the Mont St. Michel tumulus, also as would seem devoted to the interment of a single body which is supposed to have been burnt, yielded thirty-nine axes (celts), eleven of them of jade, twenty-six of tremolite, and two of a coarser stone. As in The Tumiac, the axes of tremolite were much smaller than those of jade; and here, likewise, several had been broken before

* *Rapport sur la Grotte Sépulchrale dans la Butte de la Tumiac*, Vannes, 1853, p. 4.

being deposited. There were also the remains of one or more necklaces of beads and pendants, mostly of jasper, but some made from bones, apparently those of a bird. There were two fragments of flint.[a] In neither of these barrows were there any fictile remains, such as have been so often found in other chambered barrows of Britany.

I am not aware that in any of the chambered tumuli of this part of France, any more than in those of England or Scandinavia, implements or weapons of metal, either bronze or iron, have been met with; whilst those of stone, as we have seen, are very common. In one circular and triply-chambered barrow, however, at Plouharnel, in addition to such implements of stone, the explorer, the late M. le Bail, was fortunate enough to find two broad collars of gold.[b] Many reasons might be assigned for the belief that the precious metal gold has has been known to and worked into ornaments by man, in various parts of the world, whilst in possession of no other tools than those of wood, bone, or stone. We have no record of any golden ornaments having been found in any of the chambered barrows of England; but this continental instance makes it not improbable that such have been met with by treasure-seekers in distant ages.[c] The *auri sacra fames* may perhaps best explain the very extensive rifling to which this class of tombs has undoubtedly been subjected.

On the whole, the comparison of the objects found in the chambered barrows of South Britain with those from similarly constructed tombs in both Denmark and Britany, would seem to imply that whilst their builders were in no degree inferior, but in some respects superior, to their continental contemporaries in architectural skill, their implements and tools were both less highly finished

[a] M. de Galle's Report of the examination, as abstracted by the Rev. E. L. Barnwell, *Arch. Cambrensis*, 1863, 3rd s. x. 47.

[b] See the ground-plan of this barrow in the paper "On the Construction of Chambered Barrows," by the Rev. W. C. Lukis, F.S.A., *Journ. Brit. Arch. Assoc.* 1866, xxii. 258, pl. xv. fig. 3. Mr. Lukis has lately devoted much time to the careful survey and planning of the chambered barrows of Britany, and has been aided in the work by Sir Henry Dryden. He is of opinion that most, if not all, of the elongate tumuli of this part of France were originally circular, and enlarged by subsequent additions. He finds likewise, I believe, that the orientation of the chambers differs from that of the English ones.

[c] In the course of my excavations in Wiltshire I have often found among the peasantry the notion that there is abundance of gold in the barrows. At the tumulus called Ell Barrow (Table I. No. 15,) I was told of a dream that a gold chair was concealed in it. I need scarcely say that the dream was not verified, as was the case at the Fairies Hill, near Mold, where the gold corselet was found. *Archæologia*, xxvi. 425.

and less generally diffused, and were perhaps too valuable to be deposited in great numbers in the tomb.

Secondary Interments.—Secondary interments have but rarely been found in the chambered tumuli of North Wiltshire and Gloucestershire; and no case can be adduced, as in the unchambered long barrows, which can be assigned to the bronze period of pre-Roman Britain. The stone period probably lingered much longer among the Dobuni of Gloucestershire than in South Wiltshire, where the Belgæ, if they did not originate, must at least have introduced, a much more free use of bronze, and where as a consequence circular barrows covering interments of the bronze period are common. In Gloucestershire, on the contrary, circular tumuli are comparatively rare. The only unequivocal example of a secondary interment in one of our chambered long barrows is that of Uley, where, above one of the side chambers, and within a foot of the surface of the mound, was a skeleton lying north-east and south-west, which, from three third-brass coins of the three sons of Constantine the Great, deposited with it, appeared to belong to the Roman period. In the tumulus at Nether Swell (No. 25), levelled since this paper was read, I am informed by the Rev. David Royce, that two skeletons broken and headless were met with in dispersed parts of the mound. Secondary interments of the Anglo-Saxon times, as we have seen, were found in several of the unchambered long barrows of South Wilts; but in no case, so far as I know, in the chambered mounds now under consideration. South Wiltshire was at an early date possessed by the West-Saxons; but they did not acquire Gloucestershire until a much later period, nor had much hold upon it until after their adoption of Christianity, when sepulture in the burial-mounds of the old pagan inhabitants of the land would probably be seldom resorted to.

Type of Skulls from Chambered Long Barrows.—The skulls derived from the chambered long barrows of North Wiltshire and Gloucestershire correspond in their general form with those from the unchambered long barrows. Though, on the average, not quite so long or narrow, they are very remarkable for their dolichocephalic and stenocephalic type. There are several reasons, from time to time glanced at in these papers, for believing that the Belgic immigrants very much if not altogether superseded the aboriginal population of South Wiltshire, so far at least as the governing classes, or those who would be buried under tumuli, are concerned. On the other hand, the more northern district, here in question, was clearly that of the Dobuni,[a] doubtless an aboriginal tribe, whose

[a] The capital of the Dobuni, the Corinium Dobunorum of Ptolemy, the modern Cirencester, is situated

area, prior to the advent of the Belgæ, had been more extended, and whose numbers were probably reinforced by migration from the Belgic district. In the midst of a somewhat inhospitable region, that of the Cotteswolds, this tribe of the "Britons of the interior," may have lived on, perhaps down to Roman times, and have preserved their primitive mode of life, and with this, their ancient funeral customs, including the burial of their chiefs and other principal people in long barrows rather than round ones. It is not, however, improbable that as time elapsed some mixture with the adjoining tribes would take place; and by this means that the skull-form may have been to some extent modified with the result of some divergence from the extremely long and narrow form. To what extent such an explanation may apply will be best understood on a comparison of the following table of measurements of the skulls obtained from the chambered long barrows with that of the other series of skulls, from the unchambered long barrows, which has been given in the preceding part of this paper (*ante*, p. 198).

Skulls from Chambered Long Barrows in Gloucestershire and North Wiltshire.

	No. of Skulls.	Breadth-Index. Range.	Mean.
13. Uley, Gloucestershire	2	·71—·74	·72[5]
1. Littleton Drew, North Wilts	7	·68—·74	·71
5. West Kennet ,,	4	·67—·73	·70
14. Nympsfield, Gloucestershire	2	·74—·75	·74
15. Rodmarton, ,,	5	·71—·74	·73
16. Charlton Abbot's ,,	17	·68—·77	·71
11. Oldbury, North Wilts	3	·68—·74	·71
Total and averages	40	·67—·77	·71[5]

On comparing this Table with the former one, it will be seen that, whilst the twenty-seven skulls from the unchambered long barrows of the more southern district have a mean breadth-index so very low as ·69, the forty skulls from seven chambered long barrows of the northern district have the somewhat higher breadth-index of ·71[5]. An average length of skull, however, which is represented by a figure for the breadth-index so low as ·71[5], cannot be regarded as other than very remarkable. It is very decidedly lower than that observed in any people of modern Europe.

almost exactly in the centre of the area occupied by this tribe, and which area is likewise that of the chief distribution of chambered long barrows.

Religious Rites at the Tombs; Anniversaries; Practice of Necromancy.—Before leaving the chambered barrows, there is one subject in connection with them which deserves more attention than it has obtained. The bones and teeth of animals used for food, the fragments of pottery and flint flakes, all of which are so commonly found near the surface of these tombs, and in particular at or near the base of the standing stones, monoliths, or triliths, which occupy the broad ends of several of them, may, I think, be best regarded as the traces and remains of funeral feasts and offerings to the *manes* at the grave itself. Such customs, according to the testimony of all antiquity, appear to have been almost universal through Europe and much of Asia in early times. Virgil, so learned in all archæological questions, repeatedly enumerates the ceremonies of this description. In the obsequies of Polydorus,[a] the Trojan fugitives are described as heaping a great tumulus of earth, and raising also an altar to the manes, decked with dark fillets and wreaths of cypress; where the sacrifices of the dead consisted of libations of new milk, and cups of "sacred blood" (taken, that is, from the victim or victims killed on the occasion); but which, as other passages teach us, were not offered as a burnt sacrifice, but were cooked and eaten, either as boiled or roast.[b] Many other passages might be adduced to show the nature of the funeral ceremonies in the earliest times among the Greeks and Romans; which *mutatis mutandis*, and allowing for their inferior material civilisation, may be presumed to have been practised even by the aboriginal population of distant Britain.

Nor must we forget the visits to the tombs on the recurrence of each anniversary of the death, when offerings of various sorts were made to the dead,—wine,

[a] Ergo instauramus Polydoro funus, et ingens
Aggeritur tumulo tellus; stant Manibus aræ,
Cæruleis mœstæ vittis atraque cupresso,
Et circum Iliades, crinem de more solutæ.
Inferimus tepido spumantia cymbia lacte,
Sanguinis et sacri * pateras; animamque sepulchro
Condimus, et magna supremum voce ciemus.
Æneid, iii. 62.

[b] Læti
Dona ferunt; onerant aras, mactantque juvencos;
Ordine aëna locant alii, fusique per herbam
Subjiciunt veribus prunas, et viscera torrent.
Æneid, v. 100.

* Id est, "de victimis sumpti." Servius *in loco*.

oil, milk, honey, the blood of victims, pure water, and flowers. It is with the prospect of such anniversary visits to his tumulus, and the presentation of such offerings, that Virgil represents Palinurus as being gratified.[a] On the Hellespont, near Sigeium, was the reputed tomb of Achilles and Patroclus,[b] where for many ages the people of the Troad performed periodically sacred ceremonies in their honour. This tumulus, said to be still visible, was visited by Alexander the Great, by Julius Cæsar, and by Germanicus. Plutarch describes the former as offering libations to the heroes, as anointing the pillar-stone or *stela* with oil, and, with his friends, according to the custom, running naked round the tomb.[c]

The Romans had a festival in the month of February called *Feralia*, during which they carried to the tombs food for the use of the dead. This, as practised by some Christians, is denounced by St. Augustine, where he speaks of those who "banquet riotously over the graves and offer meat even to the dead."[d] All over the world, in certain stages of civilisation, such customs have prevailed. Even

[a] Et statuent tumulum, et tumulo solemnia mittent;
Æternumque locus Palinuri nomen habebit.
Æneid, vi. 380.

The poet describes particularly the offerings in the case of the visit of Æneas to the tomb of his father Anchises, on the anniversary of his death,—"diem semper acerbum, semper honoratum,"—

Hic duo rite mero libans carchesia Baccho
Fundit humi, duo lacte novo, duo sanguine sacro,
Purpureosque jacit flores, ac talia fatur.
Æneid, v. 77.

[b] *Odyssey*, xxiv. 80. Comp. Strabo, lib. xiii. c. 1, s. 32.

[c] Plutarch, *Vit. Alexandr.* No doubt Alexander passed round the tomb, in the direction of the sun, from right to left. Even the rude Esquimaux, as we learn from Parry, walks slowly round the grave, in the direction of the sun, five times, and then at the last circuit stops for a few moments at the head. According to Arrian (i. 12), Alexander placed chaplets on the tumulus. Mr. Lukis (*Bircham Barrows*, p. 10) tells us that "on the Continent processions and superstitious rites are still performed annually round tumuli, such rites originating perhaps with a remote pagan worship."

[d] *De Civ. Dei*, iv. 31. The custom seems to be referred to in one of the apocryphal books, where "messes of meat set on a grave" are spoken of. (Ecclus. xxx. 18.) When, several centuries after Augustine, many of the tribes of northern Europe had accepted Christianity, these pagan customs were everywhere prevalent. In the "Indiculus Superstitionum et Paganiarum" appended to the Capitulary of Carloman (A.D. 743), in the epistles of our own St. Boniface, and in the edicts of different provincial councils, such feastings and "sacrificiæ mortuorum" (Psalm cvi. 28) are repeatedly condemned. Boniface (Ep. 82) refers to sacrilegious priests who even offered oxen and goats to the pagan gods, and eat these sacrifices of the dead. In one passage of the Capitulary (vi. 197), the faithful are admonished not to join in the pagan funeral ceremonies, nor to presume to eat or drink on the barrows; "et super eorum tumulos nec manducare nec bibere præsumant."

now, the mountain tribe of the Arrians of Travancore, on the anniversary of the death, make offerings at the tomb of milk, ghee, and other things. In Madagascar, also, after the feast of the New Year, the tombs are visited, and offerings, chiefly of the fat of bullocks, made to the spirits of deceased relatives ; one duty being that of seeing that the tombs are kept in repair.[a] Such practices are said even not to have ceased entirely in Christian Europe ; and Ford tells us that the Basques keep up the antique custom of offering oblations of corn and bread (*robos*), to the *manes* of the departed on the anniversary of death.[b]

In this connection it may be observed that, when shorn of heathen if not entirely of superstitious rites, the remembrance of the dead, and the decoration of their graves, on the common anniversaries of All Saints (November 1) and All Souls (November 2, " Day of the Dead "), are practices common to a great part of Christendom. As I am writing I am reminded that only the other day—December 14th—the mausoleum of the " Father of our Kings to be " was reverently visited by the widowed Majesty of England. The pious observation of an anniversary such as this, full of touching memories, is not, it will be admitted, alien even to the purest faith.

To return, however, to pagan times. Not only were the tombs visited periodically, but also at uncertain times for a definite purpose, viz. that of divination, or for obtaining oracles from the spirits of the dead. Æschylus describes Atossa as going for this purpose to the grave of her husband Darius Hystaspes, and carrying with her the usual libations to the dead and to the Chthonian divinities of milk, honey, water, wine, oil, and wreaths of flowers.[c] This practice of necromancy seems to have been all but universal among the ancients. Along with other profane attempts at obtaining supernatural knowledge and power, it was expressly forbidden by Moses, in whose laws consulters of the dead, or necromancers, are expressly denounced.[d] The Nasamones, a nomadic people of Lybia, are described by Herodotus as betaking themselves, for the purpose of augury, to the tombs of their ancestors, where, after praying, they lay down to sleep, and by the dreams which then came to them guided their conduct.[e] By the Greeks no less than by

[a] Ellis, *Madagascar Revisited*, 1867, p. 404.

[b] *Handbook for Spain.*

[c] Æschylus, *Persæ*, v. 609. See many other cases from Greek writers collected by Buckley in his note on *Œdip. Colon.* 998 (Bohn's Sophoc. 87), where in particular the ghosts of the dead are invoked to declare their murderers.

[d] Deuteron. xviii. 11.

[e] Herodot. iv. 172. The Augilæ of Pomp. Mela (i. 8,) so termed by mistake, are the same people as the Nasamones. " *Augilæ.*—Manes tantum Deos putant: per eos dejerant; eos ut oracula consulunt;

barbarians such oracles of the dead were held in high estimation, that of the Thesprotians, on the river Acheron, being the most remarkable.[a] The tomb of Tiresias, near Thebes, and that of Amphiaraus,[b] were both celebrated for the responses given at them. Those who consulted the latter slept in the sanctuary, after having prepared themselves by fasting, and the answers were expected in dreams. It is evident that the modern poet finds full justification for the picture with which he presents us, where he makes Medea say—

> And many a time, within the woods alone,
> Have I sat watching on the heaps of stone,
> Where dwell the giants dead; and many a time
> Have my pale lips uttered the impious rhyme,
> That calls the dead from their unchanged abode.[c]

That such customs obtained among those peoples of the west and north of Europe from whom we are ourselves descended there is not wanting evidence. Tertullian tells us that the Celts were in the habit of remaining all night at the tombs of their brave men, for the purpose of obtaining oracular responses.[d] He gives as his authority for this statement Nicander, whose work Περὶ Χρηστηρίων Πάντων, *De Omnibus Oraculis*, is lost. As Nicander wrote in the second century B.C., and lived at Colophon, in Asia Minor, it is probable that the Celts of Galatia were the people intended by him. The Galatians had, however, in his time not long been settled in Phrygia; and we can have little hesitation in regarding their customs as identical with those of Gaul, and in part at least with those of Britain. But, whatever may be thought of Nicander's statement, that the practice of necromancy did obtain in north-western Europe down to a much later period there can be no reasonable doubt, from the stories in some of the Scandinavian sagas. Thus of a certain Swein Briostreip, in the Orkneys, in the twelfth century, long after the conversion of the Northmen to Christianity, we are told that he was addicted to magic, and spent whole nights without sleep at the graves of the

precatique, quæ volunt, ubi tumulis incubuere, pro responsis ferunt somnia." So common was the practice that the Emperor Julian accused the Christians of magical purposes in their visits to the tombs of the martyrs, and of seeking prophetic dreams by sleeping on their tombs. Neander, *Church History*, Eng. ed. iii. 121.

[a] Herod. v. 92, § 7.

[b] Augustin. *Civit. Dei.* i. 40.

[c] Morris, *Life and Death of Jason*, xv. 449.

[d] Tertullian, *De Anima*, c. 57. "Et Celtas apud virorum fortium busta, eadem de causa (propria oracula captare) abnoctare ut Nicander affirmat."

dead, in order to consult them and obtain answers, which, as the story shows, was done for no good purpose.[a]

It appeared desirable to review at some length the beliefs and customs of Pagan antiquity, in virtue of which the tumuli were visited by worshippers of the manes, either from motives of natural affection or for the purpose of divination. On those occasions, as we have seen, it was customary to take libations to pour on the tombs; and it is hence not improbable that many of the fragments of pottery, both primeval and Romano-British, so commonly found near the surface of tumuli, are those of earthern vessels in which such offerings had been carried. This explanation is applicable not merely to chambered long barrows, but doubtless, likewise, to tumuli of all descriptions, both long and round. Such practices would be more or less rife, according as local memories and traditions obtained more or less credence. In no case, probably, would they exert so strong an influence as in that of many long barrows, dignified either by standing monumental stones, or by being encircled with a peristalith, as was Wayland's Smithy, a ruined tumulus of this very description.

There are numerous superstitious usages which lingered during many centuries in all the countries of Europe including our own, and in which pagan sacrifices and oblations were more or less repeated or imitated. Localities held sacred under paganism were still so regarded by the vulgar; fountains, trees, and *stones* continued to be visited on certain days, and under particular circumstances; and offerings, including even the bloody sacrifice of animals, were made at or near them. "Stones" are named in the decrees of various councils of Anglo-Saxon times, so late even as those of Edgar and Canute, in whose laws such practices are denounced. "Heathenism," say the laws of Canute, "is that men worship idols, and the sun or the moon, or rivers, fountains, or *stones* of any kind." In the "Indiculus Superstitionum et Paganiarum" of Carloman, already mentioned, the pagan usages connected with stones reputed to be sacred are referred to under the seventh chapter—"De his quæ faciunt super petras." This may be understood as referring to the pouring of libations, the lighting of candles and torches, and the offering of other sacrifices. As to this there can scarcely be a doubt when we find St. Eligius (St. Eloy), in preaching to the Franks, early in the seventh

[a] Torfæus, *Orcades*, c. xxiii. The story is also given from an original saga, in *Proc. Soc. Antiq. Scot.* 1858, ii. 279. The sagas are full of stories of attempts to make the dead speak, or of necromancy. It may also be remarked that, according to Professor Rafn's interpretation of the Runic inscriptions in the great chamber of the tumulus of Maeshow, some of these state that the "barrow was formerly a *sorcery hall* erected for Lodbrok." There is at least nothing improbable in such an application of the chamber.

century, saying, "Let no Christian presume to carry lights or oblations to temples, or to *stones*, or to fountains, or to trees, or to cross roads."[a] The "stones" named in these passages of ecclesiastical history and law were probably of various descriptions, and not all of the same epoch. Some, in countries occupied by the Romans, may have been sculptured and inscribed altars and cippi, such as the "Lapides Dianæ" in the Ardennes, which, with the adjacent fountains, are said to have been "gentilismi erroribus polluti."[b] Others, no doubt, were much more ancient, and belonged to the indigenous tribes. The rude monoliths and triliths, the circles of stones and cromlechs of hoar antiquity, had probably never ceased to attract devotees, and we cannot doubt were among the "stones" referred to. They seem to be unequivocally indicated in a decree of a council held at Nantes in Britany—a country in which monuments of this sort are so common By the 20th canon of this council, the "stones which are venerated in ruinous places and in the forests" are ordered to be dug up and thrown into such a place as to be concealed altogether from those who worshipped them.[c] The partial execution of this difficult order may explain the ruinous condition of so many of the dolmens and menhirs of this part of France.

Returning to our own country, it may be remarked that such monoliths as the "Hoar Stone" at Duntesbourne Abbot's, and the "Tingle Stone" at Gatcombe, and such a trilith as the "Three Stones" at Littleton Drew, distinguished, as they all are, by their position on conspicuous long barrows, are monuments which on many grounds must have been attractive to a superstitious and half heathen people.

In illustration of this last remark, we may here refer to an ancient standing-stone, or menhir, called "Long Stone," in the parish of Minchin Hampton, and distant less than a mile from the Tingle Stone tumulus above referred to. Long Stone, which is seven or eight feet in height, stands on a slight elevation, the

[a] Audoëni Rotomag. *Vita Eligii*, ii. c. 16. Quoted by Thorpe, *Mythology and Popular Traditions*, 1852, i. 255, to which work I am indebted for several of the authorities I have referred to. With the passage from the Life of St. Eloy agrees one in the *Collection of Decretals* (Burchard, xix. 5), in which are the following questions: "Venisti ad aliquem locum ad orandum nisi ad ecclesiam, *i. e.* vel ad fontes, vel ad lapides, vel ad bivia, et ibi aut candelam aut faculam pro veneratione loci incendisti, aut panem, aut aliquam oblationem illuc detulisti, aut ibi comedisti?"

[b] Thorpe, *loc. cit.* i. 257, from Vita St. Remaeli, c. 12.

[c] "Lapides quos in ruinosis locis et sylvestribus dæmonum ludificationibus decepti venerantur, ubi et vota vovent et deferunt, funditus effodiantur, atque in tali loco projiciantur, ubi nunquam a cultoribus suis inveniri possint."

remains, no doubt, of one of the chambered long barrows common in this part of Gloucestershire.[a] Near the bottom of the stone is a natural perforation, through which, not many years since, children, brought from a considerable distance for the purpose, used to be passed for the cure and prevention of disease,[b] and in particular for the relief of hooping cough and measles. The stone in fact is a holed stone, a *men-an-tol* or *tolmen*, like those so called in Cornwall, which are resorted to by the peasantry for similar superstitious purposes. Naturally holed stones are very common in the oolite of this part of the Cotteswolds; and there is a field not far from Long Stone, where on digging beneath the surface such stones are found in great numbers. They are generally small or of moderate size, and there is a dwelling-house at Burnt Ash, near Crackstone, which is built chiefly of them. The field in which they occur is called the "Devil's Churchyard," in which name there is probably a tradition of the locality having been associated with pagan sepulchral rites.

[a] Rudder, in his *Gloucestershire* (1799, p. 244), says that "Long Stone," like Tingle Stone, stood on the top of a tumulus or barrow. When I visited the spot in 1860 the barrow was scarcely visible, and the second "short stone" was found built into a stone wall which runs over the site of the mound, where it answers the purpose of a stile.

[b] See the same custom, as regards the tolmen called Odin Stone, at Stenness, Orkney. *Archæologia*, xxxiv. 101. For tolmens and their uses, see a paper *On Holed Stones*, by Mr. R. R. Brash. *Gents. Mag.* Dec. 1864, pp. 686—700

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X.—*Notes on a Picture representing the Three Children of Philip King of Castile, in the possession of Evelyn Philip Shirley, Esq., F.S.A.* By George Scharf, *Esq., F.S.A.*

Read May 23rd, 1867.

The curious triptych figured in Plate XV. appears to have been, in the first instance, a gift from Philippe le Beau and Jeanne la Folle, parents of the children therein represented, to King Henry VII., to commemorate a visit which they unexpectedly paid to this country at the beginning of 1505.

The triptych has been ascertained, by means of a brief entry in an inventory taken for Henry VIII. of goods and furniture deposited in his Palace of Westminster, to have been royal property in 1542. It is there denominated "a folding table," and occurs at the end of a long series of royal portraits.

The triptych itself consists of three arched panels, uniform in size and shape, placed side by side and joined by hinges so ingeniously contrived as to permit them to be folded and laid quite flat one upon the other. Each panel is surrounded by a deeply-moulded frame of the same piece with the rest, and measures 1 ft. $2\frac{7}{8}$ in. in height, $7\frac{7}{8}$ in. in width, and $\frac{3}{4}$ of an inch deep. The entire length, when fully open, measures 1 ft. $11\frac{5}{8}$ in. At the back of the central panel is attached a staple or flat hook for the purpose of suspension on the wall.

Each panel contains the half-length portrait of a child, surmounted, in the round-headed space above, by a shield of arms bearing the archducal crown of Austria.[a] The names of these three children are inscribed over their heads in thin white letters of an ornamental character on a flat pale grass-green background. They read as follows, from the left to right—"Madame Leonora," "Duc Charles," "Madame Ysabeau." We, therefore, have before us in all probability the earliest known portraits of the Emperor Charles the Fifth and of his two sisters Leonora and Isabella. Leonora, placed as the elder on his

[a] Charles's coat is quarterly of four. 1. Austria. 2. Burgundy ancient. 3. Burgundy modern. 4. Brabant. *Surtout* Flanders. In chief a label argent. The shield is surrounded by the collar of the Golden Fleece. The arms above the two sisters are the same, with the omission of the label, and each occupies the sinister side of a lozenge party per pale, the dexter side in each case being left blank.

right hand, was born at Louvain in 1498. She married, first, in 1519, Emanuel, King of Portugal, and secondly, in 1530, Francis I., King of France.[a] She finally, in her widowhood, accompanied her brother in his retirement to the monastery of Yuste,[b] and died in 1558, but a few months before him.

Charles, only known during his infancy as *Duc de Luxembourg*, was born at the Castle of Gand, in Flanders, 25th February, 1500.[c]

Isabella (Ysabeau), or Elizabeth, born 1501, was married to Christian, King of Denmark, afterwards so ignominiously distinguished as the "Nero of the North." She shared her husband's misfortunes, and died prematurely in the Low Countries, January 20th, 1525. She became the mother of the three children whose portraits are contained in a royal picture still at Hampton Court Palace, also recorded in the Westminster Palace inventory, and which during the last century was engraved by Vertue, under the erroneous designation of the children of King Henry VII.[d]

This triptych, now the property of Evelyn Philip Shirley, Esq., of Lower Eatington Park, Warwickshire, was recently offered for sale at Willson's curiosity shop, in the Strand.

When Mr. Shirley first drew my attention to it, the names of the personages, combined with the peculiarity of this "folding" arrangement of the tablets, at once associated them in my mind with a curious, and hitherto puzzling, entry in the Westminster inventory of 1542, which stands in full, thus—

"*Item, a folding table, with the pictures of the King of Castell's* (*Castile's*) *children.*"

The designation is easily explained when we remember that Philippe le Beau, son of the Emperor Maximilian, and husband of Jeanne la Folle, daughter of Queen Isabella, became King of Castile, in right of his wife, at the death of her mother, in November, 1504.

To judge by the ages of the children here represented, and making due allowance for the fact that in these times painters always made children of high birth appear prematurely old—possibly to compliment them with an appearance of wisdom and depth of thought instead of innocence and simplicity—the por-

[a] *Biographie Universelle*, s. v. *Eléonora*, p. 10.

[b] Stirling's *Cloister Life of Charles V.* London, 1853, pp. 4, 142.

[c] *Histoire Généalogique des Maisons Souveraines de l'Europe*, par. M. V. . . . , Paris, 8vo. 1812, ii. 74.

[d] See *Archæologia*, xxxix. 257.

[e] Prescott's *History of Ferdinand and Isabella*, edit. 1854, pp. 467, 477.

traits belong to the year 1505; that is, during the period between the succession of Philippe to the crown and his embarkation from the Netherlands in January, 1506, to take possession of his new kingdom.

As a work of art, the triptych is not likely ever to have been held in any particular esteem. That such at least was the case during the period of its deposit at Westminster from 1542 to 1547, may be gathered from the inventory above quoted, in which all paintings of superior artistic interest and value are distinguished by the addition of a "curteyne of yellow and white sarconette paned together" to protect them. In connection with this picture no such protection is recorded.

The style of painting is dry and timid, the colouring, especially of the flesh, chalky, but the folds of the draperies are well conceived, and bespeak the influence of a superior master. Some of the colours of the dresses appear to have been brightened by the application of fresh "glazings;" but the faces and hands, poorly enough drawn and modelled in the first instance, have escaped injury and reparation or improvement, to an unusual extent. As usual with pictures of the Flemish school, the golden ornaments, both chains, rings, and other articles of jewellery are entirely free from gilding, and are expressed chiefly by a pale yellow colour laid on with considerable thickness. The background also is of such a very pale hue that, at first sight, the thin white letters of the names upon it are almost entirely lost.

On the 8th of January, 1506, Philippe le Beau and Jeanne la Folle embarked on board a splendid and numerous armada, and set sail from Middelbourg, a port in Zealand. A furious tempest scattered the fleet soon after leaving the harbour; but the King's ship, completely disabled, was driven into the English port of Weymouth.[a] King Henry VII. on learning the misfortune of Philippe and his consort, promptly showed them every mark of respect and consideration. They were escorted in magnificent style to Windsor, and remained there under circumstances of dubious hospitality nearly three months. When the Flemish fleet had refitted and assembled at Weymouth, the royal pair once more embarked, and reached Corunna, after a prosperous voyage, on the 28th of April.

It may be deserving of incidental remark to note that from the circumstance of King Philippe's unexpected arrival in this country the illustrious house of Russell first rose into celebrity. The King and Queen of Castile on landing at Weymouth were munificently entertained till King Henry invited them to Court

[a] *Biographie Universelle*, s. v. Philippe, p. 147.

by Sir Thomas Trenchard, a resident in that part of the country. Sir Thomas had promptly summoned his neighbour and relation Mr. Russell, then newly returned from his travels, to wait upon them. King Philippe was so taken with his conversation that he desired he might enjoy his company to the Court, in which journey, "being much affected with his learned discourse and generous deportment," he recommended him to King Henry as a gentleman fitly qualified to serve him in some considerable station; and he was thereupon taken into great favour, and made one of the gentlemen of the Privy Chamber. [a]

Bacon, in his history of the reign of Henry VII., affords some interesting particulars of the intercourse maintained between the sovereigns during this sojourn at Windsor. The close of the visit is thus recorded :—

"Meanwhile King Henry (to draw out the time) continued his feastings and entertainments, and, after he had received the King of Castile into the fraternity of the Garter, and for a reciprocal had his son the Prince admitted to the order of the Golden Fleece, he accompanied King Philip and his Queen to the City of London; where they were entertained with the greatest magnificence and triumph that could be upon no greater warning. And as soon as the Earl of Suffolk [b] had been conveyed to the Tower (which was the serious part) the jollities had an end, and the Kings took leave." [c]

In a former contribution to the Archæologia,[d] describing some historical portraits, still preserved at Windsor Castle and Hampton Court Palace, I had invited attention to the great value, for the purpose of identifying the older portraits of the manuscript catalogue of pictures belonging to Henry VIII. in Westminster Palace in 1542. At that time, as only a very partial notice of this record had been made known, I ventured to urge the desirability of having the whole of that inventory, so far as related to the paintings and sculptures, carefully printed. Walpole, in his Anecdotes of Painting, had given a few extracts of some of the most characteristic entries, and Dallaway subsequently enlarged the selection in an appendix added to the first volume of his edition of the Anecdotes published in 1826. The earlier manuscript, 1542, is in the Record Office, Chancery Lane (vol. 160 of Miscellaneous Books of the Augmentation Records). The later MS., dated 1547, is in the British Museum, Harleian MS. 1419.

Speaking of this interesting document, Walpole observes : [e] "In the Inventory

[a] Collins's *Peerage*, ed. 1779, i. 245.

[b] Edmund De la Pole, beheaded 30th April, 1513.

[c] *Bacon's Historie of the Raigne of King Henry the Seventh*, ed. 1622, p. 225.

[d] xxxix. 248, 264.

[e] *Works of the Earl of Orford*, 4to. 1798, iii. 55.

in the Augmentation Office which I have mentioned, containing an account of Goods, Pictures, and Furniture in the Palace of Westminster, under the care of Sir Anthony Denny, Keeper of the Wardrobe, it appears that they called a picture *a table with a picture;* prints, *cloths stained with a picture;* and models and bas-reliefs they termed *pictures of earth;* for instance—

"Item, one table with the picture of the Duchess of Milan, being her whole stature.

"Item, one table with the history of Filius Prodigus.

"Item, one folding table of the Passion, set in gilt leather.

"Item, one table like a book with the pictures of the King's Majesty and Queen Jane," &c.

In the "Old London" volume, consisting of papers read at the London congress of the Archaeological Institute, July, 1866, and published in the following year by Mr. John Murray, all the most essential pictorial items of this inventory were inserted in the pages of an essay which I contributed "on Royal Picture Galleries." To facilitate reference, these were arranged in alphabetical order, and the old spelling of the text, from the volume in the Record Office, was scrupulously adhered to.

Mr. Wornum has, however, since this period, in the completest manner possible, transferred the entire text of the British Museum MS. in its actual order, without change, comment, or addition of any kind, as an appendix to his valuable "Life and Works of Hans Holbein," 1867. There the items are numbered, and "the King of Castile's children" stands the fifty-third on that list.

Beyond this entry in the inventory of 1547, although most of the royal pictures may be recognised, passing step by step through the collections of Charles I., James II., and Queen Caroline the Consort of George II., no further mention occurs of the triptych before us. Very imperfect records have been preserved of royal pictures during the reigns of Elizabeth and James I.; but in the year 1639 Charles I. had an elaborate account taken by Vander Doort of all the pictures belonging to the Crown, and to this we vainly turn for any entry or reference corresponding with portraits of the three children before us. All traces from this period had disappeared. In all probability this singularly arranged picture had been withdrawn from the royal collection during the reign of Queen Elizabeth when the Spanish name had sunk into such low esteem.

No brand or mark so generally found on pictures that belonged to Charles I. is traceable on any part of this triptych. When purchased by Mr. Shirley a thick coating of black lacquer covered the entire outside surface of the three panels,

and evidently had been quite recently applied. This was removed in the hope of discovering some brand-mark, monogram, or heraldic device, such as usually appears on the external surface of "folding pictures" and the "sportelli" or wings of the larger altar-pieces in German and Italian churches. Nothing, however, was found beneath the black pigment. The wood itself was of the finest grained oak, and in excellent condition.

The costumes and physiognomy of the figures are curious and merit careful attention. Charles and his younger sister exhibit the Austrian lower lip strongly developed. Eleonora has the same peculiarity, but in a very much less prominent degree. Her portraits later in life, as Queen of France, retain the same character, and are, moreover, exceedingly pleasing. Her portrait, holding an orange, is described in the Westminster inventory of 1542; and a large and fine picture in similar costume to the last named, but holding a letter instead of an orange, is still preserved at Hampton Court Palace. In the collection of H.R.H. the Duc d'Aumale is a small and well-executed portrait, also holding a letter.[a] There is a similar picture in an oval frame at Longleat, the property of the Marquis of Bath, beautifully finished. A very interesting portrait of her in widow's weeds will be noticed presently. In the girl-portrait now before us she wears a large crimson head-dress with straight edges, covering the ears and terminating in front below in sharp angles. This head-dress is lined with yellow, and covers an arched edging of sharp points or plaiting encircling her natural rich brown hair, parted in the middle above the forehead. Her dress is dark brown, with sleeves close fitting to the elbows, and below them widened and turned up with deep rich crimson. The fair neck is seen through the opening of her square cut dress, covered with interlaced gold cords, and having in front a small circular ornament pendant from a thin cord necklace. A larger rope-shaped necklace, composed of red oval beads ribbed with gold cords, hangs low down from the back of her neck and passes through her right hand. A grey narrow girdle is fastened round her waist. No rings appear on her fingers or on those of her companions. The eyes are dark chesnut brown, and lips a soft pale crimson. The red on the cheeks is remarkably low down. The expression of the eyes, if not actually staring, is decidedly piercing. This plaiting between the hood and the hair may also be seen in the Windsor Castle portrait of Anne Boleyn having a golden letter B and three pearls attached to the necklace. It appears likewise hanging over the shoulders of the portrait of Margaret Beaufort, Countess of

[a] In later days the Emperor always addressed her as "Madame ma meilleur sœur."—See *Cloister Life of Charles V.* By W. Stirling. P. 4.



George Scharf, F.S.A. del.

M&N Hanhart imp.

THREE CHILDREN OF PHILIP KING OF CASTILE.

Published by the Society of Antiquaries of London 1870

Richmond and Derby, at St. John's College, Cambridge, No. 47 of the 1866 Portrait Exhibition at South Kensington, and a portrait of her aunt, Margaret, Archduchess of Austria, at Hampton Court, No. 298 of the catalogue.

The portrait of "Duke Charles," notwithstanding the peculiar formation of the mouth, is more agreeable in expression. The eyes are slaty blue, the hair dark rich brown, cut straight across the forehead, and hanging in long waving locks behind the ears. He wears a yellow tissue cap, with a slight peak at the top, and black lined flaps turned up over the ears. A similar cap to this occurs in his father's portrait at Windsor Castle, which is described in the Westminster inventory of 1542, and again, more fully, in King Charles's catalogue, 1639.[a]

The boy's face is seen in three-quarters, turned to his right, towards his elder sister. He wears a deep crimson-coloured gown, faced with black, and yellow close-fitting under-sleeves, with narrow white cuffs at the wrist. A plaited white shirt appears round his neck, within the square-cut opening to his dress, and the collar of the Golden Fleece, composed of flints, steels, and sparks, with a small pendant fleece, lies on the upper broad black trimming in front. The collar is not gilded, but painted with clear yellow on a deep brown ground. He wears no other necklace, chain, or jewellery of any kind. His right hand nearly touches, as if just about to fall upon, the lower part of the frame, which is treated by the artist as a parapet or ledge, so frequently met with in Flemish and German pictures of the fifteenth century.

A youthful profile of Charles, on an imperial medallion, inscribed "REX CATOLICVS," is engraved in Heræus' "*Bildnisse der Regierenden Fürsten*," plate 17, No. v. His grandfather Maximilian's head is on the obverse. The young king wears a cap similar in shape to that in the triptych, and the style of countenance, with straight cut hair along the forehead, bears considerable resemblance also to the earlier portrait. As Charles did not become Rex Catholicus till the decease of his grandfather Ferdinand, King of Spain, in January, 1516, this profile cannot exhibit him younger than sixteen years of age.

Another portrait of this early beardless period, a medallion carved in boxwood, and now preserved in the British Museum, has been already described in a former contribution to the *Archæologia*.[b] It is inscribed, CHARLES · R · DE · CASTILLE · LEEON GRENADE · ARRAGON · NAVERRE · CECILIS.

The next portrait of Charles, in point of age, deserving of notice, is to be found

[a] Page 116, No. 43, of Vertue and Bathoe's edition.

[b] Vol. xxxix. p. 263.

at Versailles, in a curious group of Maximilian I. and his family, No. 3094 of the catalogue. In this picture, a highly-finished miniature on vellum, he still appears as a boy with smooth chin, black cap, and square cut hair. A considerable advance in respect to age, although still with a beardless face, is the portrait of the Emperor, holding a sprig of rosemary, at Windsor Castle, already described in the *Archæologia*.[a]

After this I would place an excellent little panel picture of the Emperor Charles, with delicate thin moustaches and slightly sprinkled beard on chin, at Knowle, in Kent. The left hand is boldly foreshortened, as frequently seen in the works of Van Cleeve, and in the portraits by Janet of Francis I. Here, however, the black hat is considerably reduced in size. The same peculiarities are observable in a small and delicately finished picture at Petworth House. Very similar in appearance and costume is the following:—A large medallion of Charles V. in profile, to the left, wearing a small hat and pointed beard, with his hair gathered in round curls, instead of the long straight-combed hair of the earlier type, engraved in Collas, *Trésor de Numismatique*, folio, Paris, 1841. *Choix de Medailles en Allemagne*, pl. 21, No. 2. The face is turned to the left; only the shoulders are seen, wearing a gown and collar, with the golden fleece hanging at the neck by a short ribbon. It is regarded as the best and most authentic representation of the Emperor in maturity, and is dated AN. ÆT. XXXIII. The lower part of the ear is distinctly shown. The peculiarity of this face, but with more developed moustaches, a fuller beard, and more strongly marked ear, is repeated in a curious medallion, a wood carving at Vienna, showing the Emperor Maximilian with his two sons, Charles and Ferdinand. It is dated MDXXXX.[b]

This group corresponds with a picture that belonged to Henry VIII., and is entered in the Westminster catalogue, No. 16 of Mr. Wornum's reprint, in his Holbein volume, thus: "Th'olde Emperouer, th'emprouer that nowe is, and Ferdynando." It continued in the possession of the Crown to the reign of Charles I. and in his catalogue, taken in 1639, the following description was made of it: "Upon the door of the chair-room—the picture of Emperor Frederick, and his son Maximilian Primo, together with another picture, with a golden fleece about his shoulders; all three in one piece. Little half figures. In a wooden frame."[c]

[a] Vol. xxxix. p. 263.

[b] See Arneth, *Monumente des Cabinettes en Wien*, fol. 1858, pl. i. No. 128, and pl. iv.

[c] *Old London*, pp. 288, 335. The above description is literally copied from the Harleian Manuscript. Bathoe, p. 119, no. 58, has not merely changed the punctuation, but altered the word Primo into Prince. He has also inserted measurements which do not appear at all in the original MS. There can be little

The same profile, turned the reverse way, with more sharply-defined moustaches and beard, hair in larger curls, and hat considerably diminished, wearing a cloak with broad spreading collar, and holding gloves in his right hand, resting both arms on a cushion, is also in the collection at Vienna. See Arneth, *ubi supra*, pl. i. No. 130, and pl. vi. page 87. It is carved in alabaster, and very remarkable as a work of art. The portraits of Charles V. are so numerous that it would be vain to attempt to particularise even those which may be held to represent the distinctive changes in his appearance. In these pages I can only endeavour to note the most leading portraits which exist of him bearing a positive date or some especial historical circumstances associated with the representation.

Of all the medallic portraits bearing a positive date, the finest and most characteristic personification of the emperor is the one engraved in Collas, pl. xx. No. 5. It is dated ANNO SAL. M.D.XXXVII. ÆTATIS · SVÆ · XXXVII. The profile is turned to the right. He wears a small bonnet, and holds a mace-like sceptre in his right hand, and a ball and cross in his left. The *toison d'or* hangs by a double cord on his breast.

The next record on a medal inscribed ÆTAT. · SVÆ · XLV., with ANNO · M.D.XXXXV · on the reverse, is published in Collas (plate xxi. No. 9), and exhibits a great change in regard to personal appearance. The cheeks have become hollow, the upper lip shrunk, and the nose consequently larger in proportion. The bonnet is fuller, with pendant earflaps, and the sleeves of his mantle are puffed round the shoulders in accordance with the fashion of the middle of the sixteenth century. The profile is turned to the left. The *toison d'or* hangs by a short ribbon in front.

A similar profile, but showing less of the figure, is engraved in Heræus, (pl. xxi. fig. 9). It belongs to the following year, and is inscribed CAROLVS V · ROM · IMP. ANNO · DNI · M.D.XLVI. The head-dress is the same as in the preceding example, but the full collar of the *toison d'or* hangs round his neck.

The face, as seen in the last-named medals, corresponds with two full-length portraits of the emperor painted by Titian. One of these now at Madrid, and lithographed in *The Madrid Museum* by Cajetano Palmaroli, under the direction

doubt that this description is intended for the same picture as no. 16 of the Westminster catalogue. Some obvious errors in the 1639 catalogue will hereafter be noticed. In the present instance, the Emperor Frederick would be Frederick IV., husband of Leonora of Portugal, and father of Maximilian, thus shifting the names one generation back, and leaving one to infer that the third "picture" or portrait, would be Philippe le Beau instead of Charles V.

of Madrazo, represents him as a tall, emaciated figure, standing in hat and small feather, with broad fur trimming to his mantle, resting his left hand on the black collar of a large dog. This picture formerly belonged to King Charles I. of England, and thus appears in the catalogue drawn up by Vanderdoort—"Done by Tichian. Item. The Emperor Charles V., brought by the King from Spain, being at length, with a big white Irish dog." [a]

The second portrait, a fine figure in black furred mantle, plain bonnet, and plain white falling collar, is seated in an arm-chair holding a paper in his right hand. The picture is in the Munich Gallery, No. 496 of the Pinakothek catalogue. The artist's name, Titianus, and the date MDXLVIII. are inscribed on the background. It has been finely lithographed in *The Munich Gallery*.

A grand picture of Charles V. painted by Parmigiano (Francesco Mazzuoli) was exhibited at Manchester in 1857, No. 210 of the Exhibition catalogue. It is described by Vasari, and we learn from his pages that the portrait was completed without any appointed sitting, after seeing the Emperor dining in public, at Bologna, in the year 1530. (See Le Monnier's edition. Firenze, vol. 9. pp. 129 and 130.) There is no traceable inscription on the picture.

The last portrait of the Emperor that I can venture to name, devoid also of inscription, is a very fine whole-length by Titian. It is still in this country, and was exhibited at the British Institution, by Mrs. Henry Dawson, in 1858, No. 12 of the catalogue.[b] He stands on a black and white pavement, wearing a richly ermined mantle, a plain black cap, and black hose and shoes. A dark green curtain is in the background, and a partridge stands at his feet. No date is observable on the picture, but the face is decidedly younger than in the last few named examples. The introduction of the partridge would almost imply that it was painted in the Venetian territory. Mr. W. Stirling observes, in the preface to his *Cloister Life of Charles V.*, that he has been unable to find any satisfactory contemporary portrait of the Emperor in his latter days. He, however, gives on the title page an effective woodcut from the fine print engraved by Æneas Vico.

With the portrait of the boy so fully before us, it has, I trust, been a matter of some interest to follow the course I have laid down, so as to compare the successive changes which the emperor's very singular physiognomy underwent,

[a] Page 86, No. 12, of Bathoe and Vertue's edition.

[b] See *Artistic and Descriptive Notes on Pictures in the British Institution, Pall Mall*, 1858. By G. Scharf, jun. p. 70.

and to watch those alterations even to the latest times when he became so faint a shadow of his former self in the monastery of Yuste.

It is now time, however, for us to turn to the remaining child—the younger sister Isabella, or Elizabeth — whose open expression and occupation, that of nursing a doll, contrasts so remarkably with the tenour and pursuits of her after life.

Even here, at this early period of her existence, the expression of her eyes can scarcely be said to be amiable. She grew up in later years to be heavy and roundfaced, indicative of indolence, with a short nose and full chin, similar in countenance to her maternal aunt,[a] Catherine of Arragon, own sister to Jeanne la Folle, whose portraits are so well known, daughter to Ferdinand and Isabella.

There is also a remarkable likeness between this portrait of the girl with a doll and that of her own daughter, youngest of the three children of the King of Denmark, represented in the group at Hampton Court Palace.[b] Among the pictures belonging to Henry VIII., we find in the Westminster inventory a second picture of this princess, taken after her marriage, thus described: "No. 29. Elizabethe of Austry, Quene of Denmark, with a curtain."[c]

The picture, which is very small, appears still to be in the royal collection at Hampton Court Palace (no. 296 of the catalogue). It corresponds also with the following entry in Vanderdoort's catalogue of King Charles's pictures taken at Whitehall in 1639 (page 115, no. 41 of Bathoe and Vertue's edition) :—

"A Whitehall piece. Item. The ninth, being Elizabeth, the Austria Queen of Bavaria, in a golden cloath habit, holding her two hands one over another."

This picture is one of four nameless portraits, similar in character, still at Hampton Court. In this solitary instance the eyes are of the required colour. The word Bavaria, however, is obviously an error for Denmark, since the rulers of the former were Dukes and Electors, and no Queen of Bavaria existed till very modern times. A portrait exists of this Queen Isabella in profile finely engraved by Jacob Binck bearing date 1523. It is placed side by side with that of her husband Christian II. She wears a French hood with a black veil falling down behind, and an elaborately wrought necklace. The dress is cut square to show the neck. Shields of arms supported by boys are introduced on

[a] *Anderson's Tables*, p. 710, I.
[b] *Archæologia*, xxxix. 257.
[c] *Old London*, p. 290, No. 21. Wornum's *Holbein*, p. 383.

each side resting upon columns. The artist's monogram is on the right hand base, and below in capital letters is inscribed

ELIZABET · DANOVRM · REGINA
ET · CE · ARCHDVCIS · AVS · ET · BVR.[a]

Her portrait in later life, wearing a richly ornamented dress with high standing frilled collar round the neck, occurs on the reverse of a finely engraved medallion of her husband, Christian of Denmark. Her highly decorated costume resembles that of the reign of Queen Mary I. of England. The inscription round the edge is ISABELLA · MARIANA · CAR(oli) CA(e) S(aris) S(oror).[b]

In the catalogue of pictures belonging to King Charles, taken at Whitehall Palace in 1639, is the following curious and inconsistent description of a portrait evidently intended for this lady:—

"A Whitehall piece. The picture of the widow of King Christian II. of Denmark. She was sister to the Emperor Charles V. In a widow's habit, in a black and part gilded frame, so big as the life, half a figure."[c]

Isabella did not live to attain the condition of widowhood, and we find that the King, her husband, survived her thirty-four years.[d]

There is, however, no difficulty in identifying the picture above described. It is still at Hampton Court Palace, No. 916 of the catalogue, and represents not Isabella, but the emperor's eldest sister Leonora,[e] in the white mourning dress of "La Reine Blanche" so peculiar to France, with which we are familiar by later portraits of Mary Queen of Scots. This remarkable picture is confirmed by a medal of Leonora in her "widow's habit," engraved in *Heræus*, pl. xxv. No. 10. The corresponding picture of Mary of Hungary, the second surviving sister of the emperor, and also in a widow's habit,[f] still remains in the royal collection. It has for many years lain under the erroneous designation of "the Countess of Lennox," No. 284 of the Hampton Court catalogue, and as such was removed to Holyrood Palace in 1864.[g]

[a] *Bartsch*, viii. 294, 92; Nagler *Künstler-Lexicon*, s. v. Binck, p. 505.

[b] *Heræus*, pl. xviii. No. 21; and plate xxv. No. 14.

[c] Bathoe's edition, page 109, No. 10. In this and all other quotations from the Whitehall catalogue, I have corrected the text according to the original MS.

[d] It is somewhat remarkable that in two entries relating to this princess in King Charles's catalogue there should be such glaring oversight as to make her a queen of Bavaria, and the survivor of her husband.

[e] *Ante*, page 250.

[f] *Vander Doort's Catalogue*, printed by Bathoe and Vertue, p. 109, No. 9.

[g] See *Old London*, 1867, p. 374.

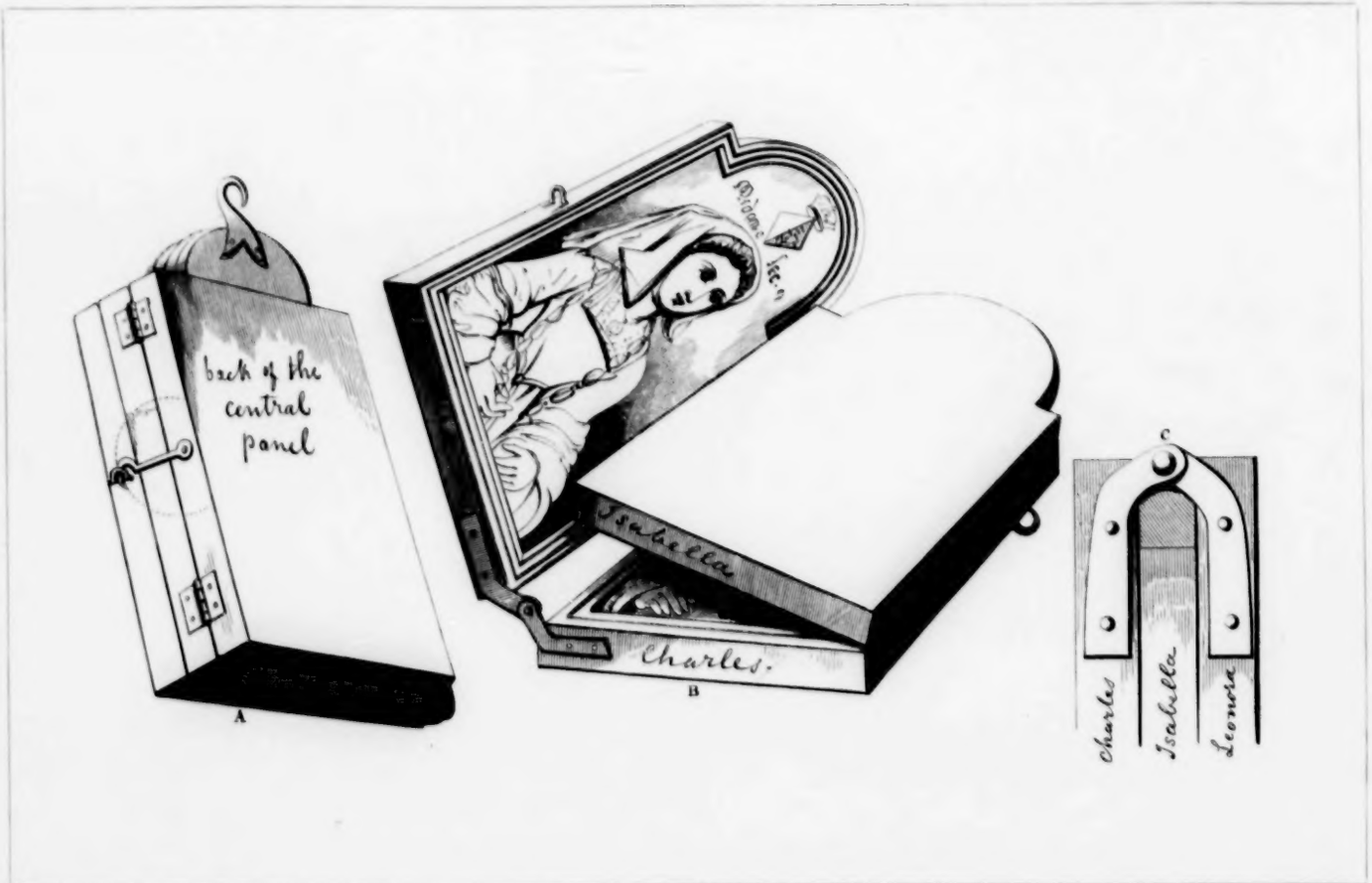


DIAGRAM SHOWING CONSTRUCTION OF A TRIPTYCH FOR PORTRAITS.

Published by the Society of Antiquaries of London, 1870.

To return to the early appearance of Isabella. We find her in the triptych before us represented as a chubby-faced child in a white coif entirely concealing the ears and hair, and showing nothing but the face. She wears a brown cap over the coif without fastenings of any kind.

The dress is black, with under sleeves of a dark blue green and a broad square white linen covering the bosom, in front of which hangs a golden cross by a yellow cord round the neck. Her eyes are intensely dark chesnut brown. The complexion is fair, with very red lips. A plain grey girdle tied in front encirles her waist. The doll which she carries in her right arm is a feature of considerable antiquarian interest. Like most representations of such imitative objects in early art, it looks quite as real as the children themselves. The dress of the doll, consisting of a crimson robe, laced in front, long sleeves expanding at the wrists and concealing the hands, with a white hood and long plaited pendant behind, seems to belong to a somewhat earlier period than the date of the picture. A singular parallel of the portrait of a child carrying an elaborately dressed doll will be found at Hardwick Hall, in the curious portrait of Lady Arabella Stuart, at the age of 23 months, dated 1577, holding a completely-attired miniature lady in the left hand. The picture has been engraved by G. Cook in Miss Costello's *Memoirs of Eminent Englishwomen*, vol. i. p. 199. It was contributed by the Duke of Devonshire to the Portrait Exhibition at South Kensington in 1866, No. 422 of the catalogue.

The complete preservation of the materials, paint, wood, and metal—particularly the continued easy working of the singularly formed hinges—shows that this curious little monument has been spared many of the vicissitudes to which works of this nature are so constantly liable. It would be very interesting, although now beyond all hope, to ascertain the history of what befel our triptych between the reigns of Edward VI. and Queen Victoria, or to arrive at the circumstance which consigned it—perhaps continuously, in some narrow locality—to oblivion during the long period of 320 years. The outlines, in woodcut (Plate XVI.), will perhaps best serve to explain the manner in which the hinges worked, and how compactly the various parts were fitted together.

XI.—*An Identification of the Compiler of a Manuscript in the possession of the Earl of Verulam, relating to a Treaty between King Charles I. and the Parliament, in* 1648. *In a Letter from* JOHN BRUCE, Esq., F.S.A., *to* C. KNIGHT WATSON, Esq., F.S.A., *Secretary.*

Read March 28th, 1867.

MY DEAR MR. WATSON,

On the 29th November, 1860, I had the honour to exhibit to the Society of Antiquaries a folio manuscript belonging to the Earl of Verulam, which contains an account of the Treaty between King Charles I. and the Parliament, held at Newport in the Isle of Wight in the autumn of 1648.

Some observations which I at that time made were afterwards printed in the *Archæologia*.[a] In the course of them I stated that there existed three other principal accounts of that Treaty; those written by Clarendon, by Nicholas Oudart, and by Sir Edward Walker—all friends of the King; but that the account contained in the MS. of the Earl of Verulam was that of the Parliamentary Commissioners. I further stated that a passage in Lord Verulam's MS., in which the writer mentioned that the Commissioners gave him a letter they had received from the Speaker, seemed to point to some Secretary or Clerk to the Commissioners as the compiler of the MS.

Since Lord Verulam's MS. was exhibited and my observations were published, I have received from Francis Kyffin Lenthall, Esq., a descendant from Speaker Lenthall, and a gentleman extremely well versed in the history of the Long Parliament, information which clearly establishes who was the compiler of Lord Verulam's MS.

The way in which this fact is made out is somewhat curious.

The Tanner MS. in the Bodleian, No. 57 (2), contains several papers relating to the Treaty of Newport, and among them a series of fragments, evidently leaves torn out of a pocket or memorandum book, and so described in an endorsement. Upon these fragments there are various written notes or memoranda which

[a] *Archæologia*, xxxix. 112.

principally intimate that the note-maker had on various specified days written letters addressed to certain persons. Thus:

"September the 16th. I wrote to the Speaker, and gave him an account of our journey, and what passed to that day; by Hardwicke."

On Sept. 21st, 25th and 29th there occur similar entries.

On Sept. 30th there is the following:—

"The 30th I wrote to my uncle Thomas Lenthall, giving him a full account of all the treaty to that day."

On the

"2nd October, I wrote to Mr. Speaker, giveing him account of the debate with our ministers &c. to that day; by Capt. Gouge."

"3rd October, I wrote to him again, telling him the whole dispute of that morning, by the post."

"5th October, I gave Mr. Speaker account of all the debates till then, and sent him a copy of the King's scruples, and our Ministers reply thereunto."

"7th October, I wrote to Mr. Speaker, by the post, of all to that day."

"9th October, I wrote to my mother, to my uncle Francis Lenthall, telling him all to that day, and the Monday after, and to Mr. Waller; to my brother Trotman also the same day."

Omitting several intermediate entries of a similar kind, on

"11th November, I wrote to my brother Trotman, my mother, Mr. Waller, Mr. Evelyn, and my sister Frances, and to Mr. Blackborne."

It is evident from the contents of these memoranda that they relate, 1. To a treaty. 2. To a treaty with the King. 3. Their dates, and the brief allusions they contain to what was passing, establish that the treaty was that of Newport, and therefore that the memoranda have reference to the year 1648. 4. It appears, also, that the writer had uncles of the names of Francis Lenthall and Thomas Lenthall, and a sister named Frances. 5. It is shown by the will of the Speaker Lenthall, contained in the volume of "Wills from Doctors' Commons" published by the Camden Society, that the Speaker had two brothers named Francis Lenthall and Thomas Lenthall. It also appears in the Lenthall pedigree (Harl. MS. 1556 fo. 120) that the Speaker had a sister named Anne who was married to Samuel Warcupp of Fulbrooke and afterwards of English, co. Oxford, and in a Warcupp pedigree contained in the same volume (fo. 80) it is stated that Mrs. Warcupp had a family of twelve children, seven of whom were boys, and that among the girls one was named Frances. 6. We find also, that, in the same volume of Tanner MSS. which contains these fragments, there is an original letter of the Speaker,

dated 27th September 1648, and addressed to Sir John Potts, one of the Parliamentary Commissioners at Newport, in which letter the writer states, "I thanke you for kinde acceptance of my nephew. I know by your good instructions he wilbe able to doe you service. What paynes or countenance you bestow shall not be forgotten by your assured freend and humble servant, William Lenthall." 7. It will have been observed that among the persons to whom the writer of the fragments addressed letters on the 11th November, one was "Mr. Evelyn." Now, among the letters of John Evelyn, written under the signature of Aplanos, to his father-in-law Sir Richard Browne, under the pseudonyme of Mr. Peters, there is one dated the 23rd October, 1648, but probably really written on the 23rd November in that year, inasmuch as it commences by acknowledging the receipt of a letter dated the 24th October. In this letter Evelyn states:

"Since my last, I received an express from a correspondent of mine in the Isle of Wight, which gives me great hopes that the treaty may yet produce something like a settlement, which we continually expect in these parts. But what was more than I expected, an enclose from Mr. Warcupp (whom Mr. Speaker hath sent thither, to give him an account of proceedings there, and whose letters to him he continually reads in the House), containing many great expressions and tender of service, if in anything there he would be useful to me; adding, withal, that if I desired a safe convey (*sic*) thither, he would readily procure it. To which (after I had returned him many acknowledgments for being so mindful of me at that distance, and after so long a discontinuance of our acquaintance) I replied,"[a] &c.

We need not enter into Evelyn's answer; but may, I think, upon the information thus gathered together, unquestionably conclude that the writer of the fragments in the Tanner MS. was a nephew of the Speaker, that his surname was Warcupp, that he was one of the seven sons of Mrs. Warcupp the Speaker's sister, and that he was sent by the Speaker to Newport as Secretary, or in some other confidential capacity, in relation to the Parliamentary Commissioners.

Among the sons of Mrs. Warcupp we have not far to seek for the identification of the one who was thus employed. Edmund, the fifth son, of whom we have an account in Anthony Wood's Fasti (ii. 325), is the only one who has any claim. This gentleman entered upon life as a Commoner of St. Alban Hall, a little before the commencement of the Civil War, but left Oxford without taking a degree, and passed a considerable time on the Continent, especially in Italy, with which country he became intimately acquainted, and there he probably fell in with Evelyn. During the Cromwellian period we are told that he was engaged in military service, and in 1659 we find him to have been a captain in the regiment

[a] Evelyn's Diary and Correspondence, iii. 31, ed. 1852.

of Sir Anthony Ashley Cooper which took a leading part in the restoration of the Long Parliament and the reinstatement of the Speaker Lenthall. A recommendation at that time of the House of Commons to the Council of State that Edmund Warcupp should be employed in the public service, was probably a token of the Speaker's affection for his nephew. Warcupp on his part testified his good feeling towards his uncle by publishing, early in 1660, a folio volume entitled "Italy, in its original glory, ruine, and revival, being an exact survey of the whole "Geography and History of that famous Country," with a laudatory dedication to the Speaker by his Cromwellian title of William Lord Lenthall. After the Restoration Warcupp distinguished himself as an active magistrate in Middlesex, especially in the time of the Popish Plot. In 1663 Oxford conferred upon him the degree of M.A., and in 1670 that of D.C.L.

Finally, he died on the 1st May 1712, at the patriarchal age of 90. He was interred at Northmoor in Oxfordshire, and in the church of that parish there stands a monument to him erected by his daughter Anna Maria Pryce, widow of Sir John Pryce, Bart., in which she commemorates her father as "Warcupporum ultimus." His honours culminated in a knighthood, which he received at Whitehall from the hand of Charles II. on the 15th December 1684.

This then is the Warcupp mentioned by Evelyn as being with the Parliamentary Commissioners at Newport, and the person to whom the compilation of Lord Verulam's MS. may be confidently attributed.

Lord Verulam's MS. was written by some one who stood in the closest and most confidential relations towards the Commissioners. He knew every thing that passed between the King and them. He was present at their interviews with his Majesty and jotted down the King's sharp and pointed sayings. He was entrusted with the care of the papers of the Commissioners, and, whether or not he had the title of their Secretary, he really and truly fulfilled the duties of that office.

All this is realised in the information we now have respecting Mr. Edmund Warcupp. We find him remaining at Newport throughout the whole treaty, writing every three or four days to the Speaker with details of what had taken place, and occasionally sending him copies of important papers which had passed between the King and the Commissioners. Evelyn tells us that these letters were continually read to the House, and Mr. F. K. Lenthall has pointed out to me, that, besides writing the letters to the Speaker mentioned by Evelyn and commemorated in the fragments from the pocket-book, Warcupp did that which seems to prove most clearly not only his confidential but his secretarial character—he wrote with his own hand official letters—perhaps all the official letters—of the Parliamentary

Commissioners to the Speaker. Two of these letters, dated the 16th and the 21st September, are preserved in the volume of Tanner MSS. above referred to (fos. 294 and 300), and are both, as Mr. F. K. Lenthall informs me, in the handwriting of Edmund Warcupp.

These circumstances lead directly to the conclusion that, to say the least of it, it is in the highest degree probable that the Verulam MS., although not as I think in Warcupp's own handwriting, but in that of an ordinary transcriber, was compiled by him. After his return from Newport he no doubt prepared this narrative of the important transactions in which he had been engaged, and furnished a copy to each one of the Commissioners.

I would beg to add that I am entirely indebted to Mr. F. K. Lenthall for all the information contained in this communication. I have inspected the papers at Oxford myself, but Mr. Lenthall directed my attention to them, and lent me his own copies of them. Nothing in this letter but one or two trifling additions to the facts, and the present statement of their contents, is my own.

Believe me,

My dear Mr. Watson,

Yours very sincerely,

JNO. BRUCE.

XII.—*Easter Sepulchres; their Object, Nature, and History.* By Alfred Heales, *Esq.*, *F.S.A.*

Read March 12th, 1868.

Some information respecting Easter Sepulchres may be met with in most works on mediæval archæology; but if the student wishes to know more about the subject, and compares their statements, he will find that the whole are derived from extremely limited sources. With respect to the structures known by the name, a paper in the *Vetusta Monumenta*, bearing the initials "R. G."[a] is the mine from which the other writers have dug their materials: and as for the ceremony for which the structures were used, one or two works furnish nearly all the little store of information yet opened to us.

In the present advanced stage of knowledge, in archæology as well as science, he must be a bold man who asserts that he has made any important discovery; the labour of the age must rather be to extend the work commenced by our predecessors, to whom we are indebted for an amount of painstaking perseverance and industry which it requires some time fully to discern and appreciate. The subject of Easter Sepulchres has never yet been treated as a whole, and it seems a worthy task (though more arduous than at first might be imagined) to present, in the form of a monograph, the whole subject in as complete a form as lies in the writer's power.

The subject naturally divides itself into two parts, connected (necessarily) with each other: the one being the ceremony, the other the structure suitable for that ceremony. The nature of the ceremony inferentially points out what sort of structure was requisite, while the nature of the structure cannot fail to have a bearing upon the ceremony; of neither alone have we that full knowledge which might be desired.

And first as respects the ceremony. It may be described as being in its nature

[a] *Vetusta Monumenta*, vol. iii. article written by Richard Gough, Director of the Society.

a rubrical ceremony, as distinguished from a "mystery" or "miracle-play;"[a] but there was also a performance permitted (though not enjoined), and regulated by certain quasi-rubrics, which can scarcely be distinguished from a "mystery." Different places had their several customs, and the office-books of some of them contain fuller rubrics than are found in others; while a notice of what was enjoined in other countries throws a light upon what was done in England. It will further be seen that there existed no rigid rule of uniformity.

The ceremony may in general terms be described as the deposit on Maundy Thursday (*feria quinta in Parasceve*) of the consecrated Host and the crucifix from the high altar, in a place apart, where it remained concealed for a time (the spot being carefully watched and guarded), in signification of the deposit of our Lord's body in the grave: partly, also, from an ancient belief that His second coming would be on Easter-eve, on account of which St. Jerome conceived that the people should wait in church until midnight, for Christ's appearance.[b] The ceremony was called in England "the making of the sepulchre:" and allusions to it are numerous.

In early times it would appear that all parochial churches had not the right to such a sepulchre. An ancient charter relating to the see of Paderborn[c] has these words, "Hæ autem parochiæ omnia jura habebunt, nisi quod crucem diebus dominicis et in solemnitatibus non ferent: . . . in Parasceve sepulturam crucifixi non facient." The date of this is not given, and there is nothing to shew that such a restriction at any time existed in our country.

The earliest English authority is as old as the Saxon times. It will be found in the *Concordia Dunstani* quoted at length by Martene.[d] The ceremony appears to have been not compulsory, but only permissible; though, judging from the con-

[a] Since this paper was read, the writer finds that a similar distinction is made by De Coussemaker (*Drames liturgiques du Moyen Age*; Rennes, 4to, 1860), who says:—"Les drames liturgiques sont ceux qui se liaient d'une manière intime aux cérémonies du culte; ils étaient la mise en action des offices des temps et des saints; ils en étaient le développement, ou le complément" (Pref. p. viij.); but that subsequently "l'esprit civil s'empara de l'élément dramatique, et en transporta, dans un but pieux, les émotions au théâtre."

[b] Hone's *Coventry Mysteries*, p. 222.

[c] Ducange's Glossary, *s. v. Sepultura Crucifixi*, citing *Monumenta Paderbornensia*, p. 134.

[d] "Unus superest ritus quem duobus tantum in locis offendi, scilicet in Concordiâ Dunstani, post crucis adorationem, et in Tullensi Ordinario statim post Vesperas." Martene, *de Antiquis Ecclesiæ Ritibus*, liber iii. cap. xiv. (fol. ed. 1738, ii. 141). Also *Regularis Concordia Dunstani*: quoted in Migne's *Encyclopédie*, cxxxvii. 493.

stitutions of Hugh Nonant, Bishop of Lichfield, dated in 1194, some such ceremonial had long been usual in his time. The passage is as follows :[a]

In nocte Natalis representatio pastorum fieri consuevit, et in diluculo Paschæ representatio Resurrectionis Dominicæ, et peregrinorum representatio die Lunæ in hebdoma Paschæ, sicut in libris super his et aliis compositis continetur.

When adopted it was to be performed in the following manner :—

A hollow place being prepared on one side or part of the altar (*in una parte altaris*), bearing some resemblance to a sepulchre,[b] and with a curtain ; after vespers on Holy Thursday, and the ceremony technically termed the Adoration of the Cross, come the deacons, the first of whom wraps the cross in a cloth, singing meanwhile the antiphons "*In pace in idipsum dormiam et requiescam*," "*Habitavit*," and "*Caro mea requiescet in spe*," and they carry it to the monument or sepulchre, and deposit it there, as though the body of our Lord were there buried, and say the antiphon "*Sepulto Domino, signatum est monumentum, ponentes milites qui custodirent illud*," and there the cross with all reverence is kept until Easter eve (*usque Dominicam noctem Resurrectionis*), when two or more brethren remove it, singing psalms.

The ordinal of Toul[c] directs that after vespers, the priest having laid aside his chasuble, and the deacon being vested in alb, stole, and maniple, and the thurifer and cerofers in albs, the cross is taken by the priest from the altar of St. Peter to the sepulchre in the following order. First proceed the cerofers followed by the thurifer, and after him the deacon, bearing the corporal folded ; if the Lord Abbot performs the office, the priest who served him at mass will carry the cross, and the abbot follow him ; and then the rest according to seniority ; saying the seven penitential psalms and "*Gloria Patri*." Then they take a position at the entrance of the sepulchre, opposite a little closed door, and the priest or abbot wraps the figure on the cross in the corporal, and another cloth round that, commencing these antiphons with a loud voice, and the choir taking them up, "*In pace*," "*Habitavit*," "*Caro mea*," "*In pace factus est locus ejus, in Syon habitatio ejus*." This done they depart by another entrance of the sepulchre, in the same order in which they entered. Then the priest or abbot closes the

[a] Wilkins's *Concilia*, i. 497.

[b] This does not seem very clear, as the early mediæval altars appear to have been solid ; it may have been a recess beside, not in, the altar. The rubric of the Roman missal runs—"Hodie paretur locus aptus in aliqua capella ecclesiæ, vel altari ;" and in an Italian office-book for the laity is the further note : "Ma diverso dall' altare ove si è celebrato." (*Uffizio della Settimana Santa Colle Rubriche volgare. Roma*, 1771.)

[c] Martene, *ubi supra*.

door of the sepulchre, beginning this responsory "*Sepulto Domino,*" and the choir follow, ending with a repetition of the versicle; and the procession retires, and the door of the sepulchre is fastened by the sacristan.

SS. Cæsarius and Aurelian, Bishops of Arles, with singular care instituted rules for festival solemnities, and one for the office of the Resurrection of our Lord,[a] the former for nuns and the latter both for monks and nuns. But these were evidently of an exceptional nature, and apparently not permanent. Also at Fountains[b] the Consuetudinary directs that before the call to vigils (apparently on Easter-eve), six or eight of the chief monks, wearing albs, remove the crucifix from the sepulchre, and restore it to its place, singing in a low voice, "*Christus resurrexit.*" Then the matins bells are sounded.

In the inventory of ornaments belonging to the church of St. Margaret Pattens, London, made in 1470,[c] is mentioned a "crosse for the sepulcour havyng reliks therein."

The chalice with the Holy Sacrament is covered with a pall and the paten. "Palla prius, quæ ut diximus alias, significat lapidem ad ostium monumenti; patena deinde ad tutelam pallæ, quasi sigillum indicet Pharisæorum."[d]

It will be observed that the above passages refer to the deposit of the crucifix only in the sepulchre, but a far more beautiful and significant act, which we must imagine to have been subsequently introduced, appears in the Sarum and other missals; it is the deposit of the Host with the crucifix in the sepulchre,[e] which prevailed up to the second year of King Edward VI.[f]

The ceremony prescribed by the rite of St. Osmund for Sarum was most likely also followed throughout England; the rites of York, Hereford, Lincoln, and Bangor being very generally similar, but less complete in rubrics;[g] and also in Scotland, as appears by the Arbuthnot missal. It differed in a not unimportant point from that directed by the office of Rome, and apparently generally on the continent of Europe, as will be mentioned later.

According to the use of Sarum,[h] on Maundy Thursday the priest is vested in a red silk cope, assisted by two deacons in albs and amices. Then—

[a] Martene, liber iii. cap. xvi. (ii. 145).
[b] *Ibidem.*
[c] *Union Review*, v. 298 (May, 1867).
[d] As in the Ratisbon Missal printed at Bamberg, 1495.
[e] Palmer's *Origines Liturgicæ Anglicanæ*, i. 186.
[f] Cranmer's Visitation Articles, Sparrow's Collection, p. 29.
[g] Gavantus, *Thesaurus Sacrorum Rituum*, pars. iv. tit. viii.; 4to ed. Paris, 1652, p. 218.
[h] *Missale ad usum insignis Ecclesie Sarum.*

Ponantur a subdyacono tres hostie ad consecrandum: quarum due reserventur in crastinum: una ad percipiendum a sacerdote, reliqua ut ponatur cum cruce in sepulchro.

The use of Constance[a] was very similar and more explicit in this respect; the rubric says, "*Tres quoque hostiæ consecrantur; una pro missa præsenti, altera pro officio crastino; tercia pro sepulcro Domini.*"

The directions in the Arbuthnot missal[b] are identical with those of Sarum.

Following the Sarum use,[c] upon Good Friday the pyx, containing the reserved host, is placed upon the altar during the adoration of the cross, and singing of the anthem, "*Whilst the Maker of the World suffered the Punishment of death upon the cross.*" Then is celebrated the Mass of the Pre-sanctified, followed by vespers; which ended, the priest puts off his chasuble, and, taking with him one of the clerics of the superior rank, both in surplices and with bare feet, replaces the cross together with the Host in the pyx, in the sepulchre, himself beginning the responsory, "*I am counted as one of them that go down into the pit; I have been even as a man that hath no strength, free among the dead,*" both kneeling; then rising, he begins the responsory, "*Sepulto Domino,*" which the choir take up, with the versicle, "*Ne forte veniant discipuli ejus et furentur eum et dicant plebi surrexit à mortuis,*" he continuing to kneel until the end of the service. The rubric proceeds thus:—

Deinde incensato sepulchro et clauso ostio incipiat idem sacerdos R. *Sepulto.* Chorus percantet, cum suo Versiculo. Ad istas tres antiphonas genuflectant duo predicti sacerdotes continue. Sacerdos incipiat Añ. "*In pace;*" Chorus prosequatur, "*in idipsum.*" Item sacerdos Añ. "*In pace factus est;*" Chorus prosequatur, "*locus eius.*" Item sacerdos Añ. "*Caro mea;*" Chorus prosequatur, "*requiescet in spe.*"

This being finished and private prayers said, the others retire as they see fit, in no fixed order, and the priest again puts on his chasuble and departs with the deacon, sub-deacon, and other ministers of the altar.

Exinde ardebit continue unus cereus ad minus ante sepulchrum usque ad processionem que fit in resurrectione dominica in die Pasche: ita tamen quod dum primus *Benedictus* canitur, et cetera quæ sequuntur in sequenti nocte, extinguatur. Scilicet, extinguatur in vigiliâ Pasche dum benedicitur novus ignis, usque dum accendatur cereus Pasche, XXXVI pedes continens in longitudine.

On Easter Day,[d] before mass, and before ringing the bells, the clergy assemble,

[a] *Missale secundum Ritum Constantiensis Ecclesiæ.* Ingoldstadt, 1579.

[b] *Arbuthnot Missal,* Burntisland reprint, p. 140.

[c] *Sarum Missal.*

[d] *Processionale ad usum Sarum.* Paris, 4to. 1528. It has a woodcut of the Resurrection, in which our Lord is represented as standing on the still-closed lid of the tomb.

and (all the lights in the church being lighted,) two of the upper grade, with cerofers and thurifers, and clergy around them, go to the sepulchre, and after censing it with great reverence, remove the Lord's body to the altar. Then they take the cross out of the sepulchre, and the chief of them begins "*Christus resurgens,*" and they proceed in procession to the presbytery. The Host in the pyx, under the care of the sub-treasurer, is placed in the tabernacle and suspended as usual. Then all the bells are rung together, and there is sung the antiphon—

Christus Resurgens ex mortuis jam non moritur, mors illi ultra non dominabitur; quod enim vivit vivit Deo. Alleluya, Alleluya.

Vers. Dicant nunc Judei quomodo milites custodientes sepulchrum perdiderunt regem ad lapidis positionem, quare non servabant petram justitie; aut sepultum reddant aut resurgentem adorent nobiscum, dicentes—(*Chorus respondeat:*)—Alleluya, Alleluya.

The use of Hereford[a] was generally similar to that of Sarum, but differed in detail, and slightly in the arrangement of the responsories. At the commencement of the ceremony the cross is set down before the door of the sepulchre, and washed with wine and water, and covered with a linen cloth; the choir singing in a low tone, or rather as a lamentation, ℟. "*Tenebre facte sunt,*" &c.; and Vers. "*In pace factus est locus ejus et in Syon habitatio ejus,*" &c.: and also, whilst it is being placed in the sepulchre, the anthems "*In pace in idipsum dormiam et requiescam,*" and "*Caro mea requiescet in spe.*" In the meantime the Bishop replaces, "*honorifice,*" the body of the Lord in the sepulchre, and incenses it and the cross. And then, a taper being lighted, he closes the sepulchre, while the choir sing "*humiliter*" the ℟. "*Sepulto Domino.*" Then the Bishop, standing before the sepulchre, sings "*Memento mei Domine Deus dum veneris in regnum tuum*" to the end.

The custom thus described continued in use until after the Reformation, as appears by the Visitation Articles of Archbishop Cranmer, 2 Edward VI.[b]

The ceremony, according to the use of Rome, as prescribed in the rubrics, is that not three, but two, hosts should be consecrated on the Thursday: "*Hodie sacerdos consecrat duas Hostias, quarum unam sumit, alteram reservat pro die sequenti, in quo non conficitur sacramentum.*"[c] And the same seems to have been

[a] *Missale ad usum celebris Ecclesie Helforden', summa cura et vigili opera nuper impressum. Rothomagi,* 1 Sept. 1502.

[b] Sparrow's Collection, p. 29.

[c] *Missale Romanum.* Basle, fol. 1488; Romæ, fol. 1862; &c. Migne, *Encyclopédie Théologique: Dictionnaire des Cérémonies et des Rites Sacrées,* p. 780. *Uffizio della Settimana Santa,* p. 175.

generally followed on the continent. At Augsburg there were three;[a] and the rubrical and other directions are fuller, as particularly specified by Migne. At the conclusion of the mass on the Thursday the hymn "*Pange lingua*" is intoned,[b] and the celebrant, in a white cope, under a canopy (borne by nobles or ecclesiastics wearing the cope, or the cotta, without stole), carries the holy Sacrament in a monstrance (not a pyx) in procession with lighted torches, and the sub-deacon carrying the cross to the sepulchre, "*locus aptus in aliqua capella ecclesiæ, vel altari . . ornetur cum velis et luminibus.*" The sepulchre is in Latin called either "*Sepulchrum*" or "*Monumentum*;"[c] in Italian, "*Il sepolcro della Settimana Santa;*"[d] and in French, "*Le Réposoir;*" in Spanish the structure is termed "*El Monumento.*"[e] The celebrant deposits the monstrance on the altar, and chants the prayer "*Respice,*" then kneels, and, while the cerofers chant "*O salutaris,*"[f] thrice incenses the holy Sacrament, and then gives the benediction with one only sign of the cross. At Rome, the Pope himself carries the host to the Sepulchre.[g] At Seville, where the Easter ceremonies rival those of Rome, the procession is as follows:[h]—

Da principio por la hermandad Sacramental del Sagrario, precedida del guion y estandarte, sigue el clero y ministros del cabildo, despues los capitulares y ultimamente el Prelado que conduce la Magestad bajo un hermoso Pálio; cerrando la procession el Gobernador de la provincia, á quien, colocada la Magestad en el Monumento, se pone al cuello la llave del sagraria, pendiente de un cordon de oro.

In some places in England it appears to have been usual on this occasion, instead of a pyx as in the Sarum use, or an ordinary monstrance as in the Roman office, to employ a special article of plate in which the Host was visible through a bright crystal. That at Durham is described[i] as "a marvelous beautifull IMAGE OF OUR SAVIOUR, representing the resurrection, with a crosse in his hand, in

[a] Gerbert, *Monumenta Veteris Liturgiæ Alemanniæ*, i. 77; and his *Vetus Liturgia Alemannica*. Also *Saltzburg Missal*, printed at Nuremberg, 1498; Augsburg, printed at Basle, 1510; Magdeburg, printed 1497, and others.

[b] Except by the priest, who says it secretly. (*Settimana Santa*, p. 175.)

[c] *e. g.*, "Hic currunt Johannes et Petrus simul ad *sepulchrum:* et Johannes prius venit ad *monumentum*, sed non intravit." (*Coventry Mysteries*, Halliwell's ed. p. 358.)

[d] Moroni, *Dizionario Ecclesiastica*, *s. v.*

[e] Velasquez de la Cardena, *Spanish and English Dictionary*, 1863.

[f] "*Tantum ergo Sacramentum*," according to Picart, *Religious Ceremonies*, ii. 19.

[g] *Ibid.* [h] *Descripcion del Templo Catedral de Sevilla.* Sevilla, 1850.

[i] *Cosin MS.* in Durham Cathedral library, printed by the Surtees Society, xv. 10; and, also, with less literal exactness, in Davies's *Rites of Durham*, p. 22.

the breast whereof was enclosed in bright christall the holy Sacrament of the Altar, throughe the which christall the Blessed Host was conspicuous to the behoulders." The Cathedral of Lincoln[a] possessed "an image of our Saviour, silver and gilt, standing upon six lions, void in the brest, for the sacrament for Easter-day, having a beral before and a diadem behind, with a cross in hand, weighing 37 ounces." And a similar image was bequeathed by Cardinal Beaufort[b] to Wells Cathedral:—

Unam ymaginem argenteam deauratam, resurrectionis Dominicæ, stantem super viride terragium amilasatum, habentem birillum in pectore, pro corpore Dominico imponendo; ponderis Trojani octuaginta et quindecim uncias.

Among the treasures still preserved at Cologne, there is at the church of the Friars Minor a small crucifix,[c] considered to date from the first half of the thirteenth century, in the breast of which is a glass or crystal in the form of a heater shield, evidently intended for some such purpose.

In the Roll of Coldingham Priory,[d] for the year 1370, is an item of expenditure, "*In empcione unius ymaginis pro Resurreccione*," which might have been of the same nature.

In the inventory of Church goods of St. Saviour's, Southwark, dated 26th February, 1548,[e] is an item which there can be little doubt relates to something similar,

ij. peaces of silver knoppis, which was in the brest of the ymage of the Resurrection.

The more Northern custom appears to have been to place the Host in a pyx instead of a monstrance, and then "*Sacerdos corpus Domini in corporale diligentissime involvet.*"[f] After which the deacon, sacristan, or priest, sets the monstrance in the niche, where it is veiled according to ancient usage, and the sacristan locks the door,[g] the key of which is, by a decree of the Congregation of Rites in 1610, not to be given to a layman, even though a noble, but only to an ecclesiastic.[h] All the lights except that by the processional cross are extinguished, and the priest changes his vestments from white to purple, and returns to the choir, or sacristy, while the rest sing the hymn "*Pange lingua gloriosi.*"

[a] Inventory of jewels, vestments, &c., of Lincoln Cathedral, 1536. Dugdale's *Monasticon*, vi. 1279.
[b] *Ibid.* ii. 280 n. [c] Engraved in *Les Trésors Sacrés de Cologne*, par Franz Bock, fig. 87, pl. 25.
[d] *Priory of Coldingham*, Surtees Society, vol. xii. Appendix lxi.
[e] Inventories of Church Goods in Surrey, printed in the Surrey Archæological Society's *Collections*, iv. 84.
[f] *Magdeburg Missal*, A.D. 1497. [g] Picart's *Religious Ceremonies*, ii. 19.
[h] *Settimana Santa*, p. 177.

According to some rubrics,[a] the crucifix from the high altar is deposited with the Host in the sepulchre, and perhaps that was the most usual custom. At Ratisbon the crucifix only is mentioned as placed in the sepulchre,[b] and the office runs thus: The priest, with the ministers, takes the crucifix to the sepulchre, all singing ℟ "*Recessit pastor noster,*" with versicle; then they place it in the sepulchre, and with bended knees read ("*submissa voce absolute*") the psalms "*Confitebor,*" "*Domine probasti me,*" "*Eripe me Domine,*" "*Domine clamavi,*" and "*Voce mea,*" without "*Gloria.*" Then "*Christus factus est pro nobis obediens,*" followed by the "*Magnificat,*" without "*Gloria;*" then "*Proprio filio suo non pepercit,*" and "*Pater noster;*" afterwards "*Miserere mei Deus,*" with the versicle, "*In pace factus est.*" Then the crucifix is aspersed and incensed, and they retire singing "*Sepulto Domino,*" *lenta voce.*

It is the custom in Rome at the present day for the mass to be celebrated in the Sistine Chapel of the Vatican, while the Pauline Chapel is used as the sepulchre.[c] In Winchester Cathedral there is a chapel called the "Chapel of the Holy Sepulchre.[d] In some places the host is deposited in the sacristy,[e] but elsewhere it is directed only that some suitable place should be prepared for its custody.[f]

On Good Friday the pyx was removed in procession, with lights and incense, to the altar, whilst the hymn "*Vexilla regis prodeunt*" was sung, and the "Mass of the Presanctified" celebrated; after which it was taken back (still containing the third Host), with like ceremony, to the sepulchre. Picart[g] states the removal to have been on Easter-eve instead of Good Friday, but this would seem to be in error.

The Evangelist's account runs thus:[h] the Chief Priests and Pharisees asked Pilate—

> Command therefore, that the sepulchre be made sure until the third day, lest his disciples come by night and steal Him away, and say unto the people, He is risen from the dead; and so the last error shall be worse than the first.
>
> Pilate said unto them, Ye have a watch; go your way, make it as sure as ye can.
>
> So they went, and made the sepulchre sure, sealing the stone and setting a watch.

In remembrance of this the Easter sepulchre was lighted and constantly watched until the removal of the Host or crucifix.

[a] *e.g.* Augsburg ed. 1510.
[b] *Ratisbon Missal*, printed at Bamberg, A.D. 1495.
[c] Picart, *ut supra.*
[d] *British Archæological Association Congress*, 1845, p. 264.
[e] *Missal of Use of Passau*, A.D. 1532; *Salzburg Missal*, A.D. 1498; *Ratisbon Missal*, A.D. 1518.
[f] *Settimana Santa.*
[g] Picart, ii. 19.
[h] St. Matthew, xxvii. 64 to 66.

All authorities accord in directing that there should be one light, at least, constantly burning whilst the holy Sacrament remained there.[a]

The following are illustrations from extraneous contemporary sources :—

1370. A guild in the parish of St. Botolph without Aldgate[b] was founded in honour of the body of Christ, and to maintain thirteen wax lights burning about the sepulchre in the time of Easter, and to find a chaplain. The objects of the guild were afterwards extended, and it became the Brotherhood of the Holy Trinity, of the same parish; but the original object was still maintained, as appears by this entry in their "Blake Registre Boke."

> Also there ben ordeyned xiij. tapers of wax, and every taper of sex pounde of wax, with dysches of pewtre accordynge thereto, forto brenne about the sepulcre on Estre's Eve and Estre's Day, al so longe as the maner es in Holy Chirche.

1433. Margaret Blackburn, the widow of a citizen of York, by her will[c] orders eight wax torches, each weighing 16 lbs., to burn at her exequies, and afterwards to be distributed between the churches of All Saints North Street, St. John the Evangelist, and the Holy Trinity, York; and St. Mary the Virgin, Richmond: there to burn "annuatim, die Paschæ, tempore Resurrectionis Domini nostri Jhesu Christi, dum durare poterunt."

1439. The will of Alvered Manston[d] contains this passage :—

> In honore domini nostri Jhesu Christi et quinque vulnera ejus, ordinentur quinque libræ ceræ in candelis ad ardendum ante sepulcrum in ecclesia predicta (Whitkirk) et xv d. ad solvendum eodem die pauperibus, et hoc pro termino quinque annorum proxime post mortem meam sequencium.

1460. Abbot Wheathampstead, of St. Alban's,[e] gave money for twelve candles for ever, "ardere circa sepulchrum Dominicum."

1463. The will of John Baret[f] mentions a Resurrection Guild at Bury, and bequeathes to it 8*d.* for eight tapers "stondyng at the grawe of resurrecc̃on gylde."

[a] Fosbroke, *Encyclopædia of Antiquities*, i. 49. Office for Holy Week. Missals of Sarum, 1527 and 1534; Rome, 1577; Magdeburg, 1479, *cum aliis*. Nuremburg, 1498, directs that there should be seven lamps, or two candles.

[b] Hone's *Ancient Mysteries*, pp. 77, 82.

[c] *Testamenta Eboracensia*, ii. (Surtees Society, vol. xxx.) 46.

[d] *Ibid.* p. 73.

[e] *Vetusta Monumenta*, vol. iii.

[f] *Bury Wills*, Camden Society, xlix. 28.

1465. Great Yarmouth accounts[a] contain charges for watching the sepulchre and tending the sepulchre lights.

1471. The will of Richard Tong, of York,[b] directs to be buried in the (since destroyed) church of St. Nicholas, Micklegate, and adds:—

> Volo quod executor meus inveniet et sustentabit candelam meam vocatam Sepulcre-candell, in custodiâ Johannis Belamy, ponderantem iiij. li. ceræ, sumptibus meis propriis et expensis, annualiter combusturam coram sepulcro Domini in festis Paschalibus in ecclesia mea parochiali secundum usum ac laudabilem consuetudinem civitatis Ebor. durante termino vij. annorum post diem sepulturæ meæ.

1475. In the will of Sir Thomas Tyrrell, Knt.,[c] occurs the following:—

> Where as there hath been gadred of me and of myne houshold many yeres certaigne money, whereof parte hath gone yerely to fynding of the sepulchre light, I woll that myne Executours, to th'entent that a good Rule be hadde hereafter to the pleasure of God, and for the soules that any thyng have given thereto shall give and deliver of my godes to the fynding and contynuance of the saide light v. li. sterling. And I woll that all other somes bilongyng to the saide light and being in other mennes handes shalbe gadred and be delivered unto Humfrey Tyrrell, and others, they to se that it may from hensforth be employed to the wele and profite of the saide light.

1479. The will of Thomas Windsor, of Stanwell,[d] directs that of four wax tapers to be used first at his burial, "ij of them to brene yerely as long as they will endure about the sepultur of our blissid Lord at the time of Estre."

1482. St. Stephen, Walbrook, London.[e]

> Item payd on Estren Evyn to William Breyt and to Ray's man *pur* wetchyng of the sepulcur . . . . . viij^{d}.

1483. Same.

> Item payd to the Clerkys when they wachyd the sepulker for ther drynke and bred . . . . . iiij^{d}.

1485. Same.

> Item payde to the Clerkeys at ester A^{o}. ij^{do}. for coleys, water, and ale and candel when they wacheyd the sepolker . . . x^{d} q^{t}.

[a] Swinden's *History of Great Yarmouth*, p. 811.
[b] *Testamenta Eboracensia*, iii. (Surtees Society, vol. xlv.) 190 n.
[c] Prerogative Registry, 31 Wattis. [d] *Ibid.* 7 Logge. [e] Parish Accounts (unpublished).

1499. Reading, St. Lawrence[a] (churchwardens' accounts).

Payed for wakyng of the sepulcre . . . . . viij^{d}.
It. payed for a li. of encens . . . . . xij^{d}.
It. payed for colys . . . . . j^{d}.

1499. St. Mary-at-Hill, London,[b] accounts.

For the waching of the sepulchre and the Chirche to iii men . . xij^{d}.
For brede and ale to them that wached . . . . . vj^{d}.
For a lampe and for tentyr hookes for the sepulchre . . . j^{d} ob.

1504. The will of Anne Barrett[c] directs that—

An honest prist and a queerman shall syng for my soule . . by the space of xx^{ti} yeerys in the churche of our Lady in Bury aforseid, at the Resurrecc̃on aughter. It'm I wyll that myn executors shall by a messbook suffycyent, with all other thyngs necessary for a prist to syng messe yn, with curteyns and aughter clothes necessary; which messebook, chalys, vestment, and othyr stuff I wyll it shall remayn at the Resurrecc̃on aughter aforseid to the woorshyppe of God as longe as yt may endure.

1504. Thomas Pakenham, of Ixworth Thorpe, by his will[d] leaves

To the sepulkyr lyght vj. hyves of beene (hives of bees) to pray for me and my wyffe in all common sangred.

1507 to 1538. St. Stephen, Walbrook, London.[e] Frequent payments occur for watching the sepulchre, and bread and ale for the watchers, and coals and candles; usually 8*d.* or 10*d.*

1529. Heybridge, Essex.[f]

Memorandum: Thatt in the 21st yere of Kynge Henrye VIII. the bachellers of the paryshe of Heybryge have delyvarede the 9 tapers belonging to the sepulker, at the feste of Ester, each taper contaynynge 5 pownde of waxe. Sum, 45 pownde of waxe. And they have (in hand) above all charchgys 5*s.* 10*d.* And so remaynethe in the stoke clerely above all chargys 43 pounde of waxe, the whyche restyth in the handes of Richard Langore, wax-chandeleyr.

Also a similar entry respecting the maidens who had delivered 9 tapers each of 5 pounds, and in hand 2*s.* 10*d.*

[a] Coates's *History of Reading*, p. 214.

[b] *Vetusta Monumenta*, vol. iii. and Nichols' *Illustrations*, p. 102.

[c] *Bury Wills*, Camden Society, xlix. 95.

[d] *Bury Wills*, Lib. Fuller, fol. 70 (Camden Society, in notes, p. 252.) The editor adds that what that particular service was is not ascertainable.

[e] Parish Accounts (unpublished).

[f] Nichols's *Illustrations*, 177.

1530. The will of John Cleris, of Ampton,[a] bequeaths

> To the sepulchre light in Ampton Church, to continew for evyr, too melche nete (milch cows) to be leten by the churchwardens for the tyme beyng, and halfe part of the money comyng yeerly of the letage of the sayd neete to go to the fyndyng of the seyd light, and the other half to bye another melche nete; so that the stoke may evyr be renewyd and encresyd, and the mony comyng of the letage of every and all thes seme nete to go to mayntenance of the sayd light to contynew perpetuall.

1531. Hurstmonceaux, Sussex.[b] Lord Dacre wills that

> Myn Executours give towarde the light of the said Sepulture oon hundred pounds of wax to be made in Tapers, of tenne pounds oon pece, to bren abought the said Sepulture after the maner as the custume is now used to bren aboute the same.

1538. By Cromwell's Injunctions,[c] 1538, the clergy were not to suffer any candles to be set before any image, but only the light on the rood-loft, the light before the sacrament of the altar, and the light about the sepulchre. These were to be allowed to stand for the ornamenting the church, and the solemnity of Divine service. It is difficult to say what authority the Royal or Episcopal Injunctions carried with them; but there appears no reason to doubt that as far as they were then lawfully binding they are so now.

1541. Reading, St. Laurence.[d]

Payd to Loreman for playing the prophett on Palme Sonday .	ii[d].
Payd for a quart of malmesey for the clerke on Palme Sonday .	iiii[d].

1542 and 1554. Waltham Abbey.[e]

> Paid for watching the Sepulchre 4d. and 8d. respectively.

1545. Wigtoft, Lincolnshire.[f]

> Me[d] that John Nebyle and John Butler, Aldermen of the Sepulcre lyght in A° dni M.CCCCC.XLV., A° H. VIII., xxxvj., have delyvered by the paryshoners to th'use of the seid lyght, 9*s.* 7*d.* And also be it remembred that ther is at this day fyve score and twoo pounde waxe in the seid lyght.

[a] *Bury Wills*, Lib. Brett, fol. 54 (Camden Society, vol. xlix. in notes, p. 249).

[b] Prerogative Registry, 13 Hogen. In *Testamenta Vetusta* (ii. 653) it is put "C. l." as though it were a hundred pounds in money instead of wax; the same is copied in "Rock's *Church of our Fathers*," iii. 69.

[c] Collier's *Church History*, ii. 150.

[d] Coates's *Reading*, p. 130.

[e] *Archæologia*, i. 19.

[f] Nichols's *Illustrations*, p. 232.

1546. St. Michael, Spurrier-Gate, York.[a]

Pd. for Pake thred for bynding of S^t^ Pulcur Candylls . . . . . ½^d^.
Pd. for whyt Thred to the Parysh Clark for sewying of Seynt Pulcure Howse and the Vestements . . . . . i^d^.
Pd. to John Carver for a day and di. mendyng of Seynt Pulcure Howse and for helping of y^e^ Angells' Wyngys, and the Stawyls in the Churche, and for di. Day helping of the Hamerrys (Aumbries) in the Church . . . . . 1^s^.

1546-52. Bletchingley, Surrey.[b]

Paymentes—
Item for settyng up the rood-lofte . . . . . x^d^.
Item for nayles for the same . . . . . ij^d^.
Item payd for cooles . . . . . iij^d^.
It'm for xxxviij. lbs. of waxe . . . . . xiiij^s^.
It'm for making ij. tapers . . . . . ij^d^.
It'm for ij. torches . . . . . viij^s^. vj^d^.
Item payd to Brande for watchyng the sepulcre . . . . viij^d^.
It'm to Brande for watching the sepulcre . . . . . viij^d^.
Item payd to laborers for polyng downe of the roode . . . xiiij^d^.
It'm to John Brande for watching of y^e^ sepulcre . . . . iiij^d^.

1555 and 1558. Abingdon, St. Helen.[c]

To the Sextin for watching the Sepulter two nyghtes . . viij^d^.
To the Sexten for meat and drinck, and watching the sepulture according to custom . . . . . i^s^. x^d^.
To the Bellman for meat, drinck, and cooles watching the sepulture i^s^. vij^d^.

1551. Reading, St. Mary.[d] **(The accounts begin this year at the time of rebuilding the church.)**

Receyvid of Henry More, for the sepulker . . . . xiii^s^ iiij^d^
Receyvid of John Webbe for the toumbe of brycke . . . xij^d^

1558. Same.

Paide to Roger Brock for watching of the sepulchre . . . viij^d^.
Paid more to the saide Roger for syses and colles . . . iij^d^.

1559. St. Helen, Abingdon.[e]
Charges for watching.

[a] Nichols's *Illustrations*, 316. [b] *Loseley MSS.*, edited by Kempe, pp. 164, 165.
[c] Nichols's *Illustrations*, p. 141. [d] Coates's *Reading*, p. 221. [e] Nichols's *Illustrations*, p. 142.

1559. January 29. Will of Randall Ward.[a]

> I gyffe to the Churche ij. buschells of barlye . . . to be bestowed at the dyscrecön of the churchewardons, and sett uppe a candell before the sepulcrur every yere: to be prayed for.

1561. Reading, St. Laurence.[b]

> Receyved for the Sepulchre . . . . . xxvi^{s} viii^{d}

The last three examples occur in the reign of Queen Elizabeth.

A fragment of a hymn, or prose, which has been preserved was[c] no doubt sung in the time of the watch. It runs thus:—

> Unde monumentum tale
> Quod est magis speciale
> Fit pro nequitia.
> Jesu Christi passionis
> Atque resurrectionis
> Pro nostra leticia.
> Habeamur ergo curam
> Circa Christi sepulturam
> Vigilando noctibus.
> Ut dum secum vigilamus
> In eterno valeamus
> Auspiciis celestibus.

Very early on Easter morning, before sounding the matins bell, the cross was removed to its usual place upon the altar, and then there was performed in some, and apparently many, monastic churches and cathedrals a peculiar ceremony, called the "Office of the Sepulchre." The custom in England is described in the "*Regularis Concordia S^{ti} Dunstani*,"[d] and there is a similar but briefer account of the practice at Fountains Abbey.[e] Martene speaks of it as "ritus quem duobus tantum in locis offendi," and as a use "quorumdam religiosorum imitabilem, ad fidem indocti vulgi ac neophytorum corroborandum"; but Migne's[f]

[a] *Richmondshire Wills and Inventories* (Surtees Society), xxvi. 143. [b] Coates's *Reading*, p. 130.

[c] *Vetusta Monumenta*, vol. iii.

[d] Migne's *Encyclopédie*, cxxxvij. 493, quoting from Reyner's *Concordia Dunstani*; also Martene, *De Antiquis Ecclesiæ Ritibus*, lib. iii. cap. xvi. ii. 141.

[e] Martene, ii. 145. [f] Migne's *Encyclopédie*, xliii. 847 (*Dictionnaire des Mystères*).

Encyclopædia cites a considerable number of similar ceremonies, dating from the ninth or even the eighth century at Poictiers, and the ninth at Metz; continued at Narbonne almost to our days; and at length suppressed at Bourges as a puerile show.

The custom as practised in the time of St. Dunstan (who died A.D. 988) is described thus[a]:

When the third lesson is read, four brothers vest themselves; one of them, bearing a palm, seats himself at the sepulchre; the other three wearing hoods [three canon-deacons (*diaconi canonici*) in dalmatics, and their heads covered with amices, after the manner of women—according to Ducange[b]], and bearing thuribles with incense, come as though seeking something to the sepulchre [saying this Verse, "*Quis revolvet nobis lapidem?*"—Ducange]. The one seated there (vested in an alb), personifying the angel, and the others the three Marys coming with spices to anoint the body. Then the one within, seeing the others approach, begins to sing in a low, soft voice, "*Quem quæritis?*" and the others answer together, "*Jesu Nazarenum*"; to which he replies, "*Non est hic; surrexit sicut prædixerat. Ite nunciate quia surrexit a mortuis.*" The rest, turning to the choir, sing "*Alleluia, surrexit Dominus.*" He, as though calling them back, sings the antiphon "*Venite et videte locum,*" and rising shows the void place where the cross was—the cloth only remaining in which it was wrapped; whereupon they set down their thuribles, and taking up the cloth spread it towards the choir, and, singing the antiphon "*Surrexit Dominus de sepulchro,*" place the cloth upon the altar. Then the prior begins the hymn "*Te Deum laudamus,*" and all the bells are rung together. Then follow matins.

Mention is made in some of the Edwardian inventories of church goods of stools for the sepulchre, probably for occupation by those who personified the angels. Thus at Clapham, Surrey[c] (account taken in 1550)—

> Diverse stayned clothes and stools for the sepulchre.
> Diverse old stayned and painted clothes for the doing of ceremonyes lately used in the church.

The other instances, so far as they have been preserved, are all of the same general effect, though all varying, and some being much more ample than others.

[a] *Concordia Sancti Dunstani*, ed. Reyner, p. 89; quoted by Migne and by Rock, *ut supra*.
[b] *Ubi infra*.
[c] *Church Inventories*, Surrey Archæological Collections, iv. 44, 109.

Rouen, which is one of the fullest, and dates from the twelfth century, has the following addition :[a]

After the boy personifying the angel has announced that the Lord is risen, he immediately disappears, and two priests of high rank in tunicles within the sepulchre ask, "*Mulier quid ploras? Quem quæris?*" The central woman replies, "*Domine si sustulisti eum dicito quia tulerunt Dominum meum.*" The two within answer, "*Quem quæritis mulieres?*" The Maries kiss the spot and retire. In the meantime, a canon in priest's orders, in alb and stole, holding a cross,[b] shows himself at the left angle of the altar, and says, "*Maria!*" On hearing which she instantly throws herself at his feet, exclaiming "Cabboin!" [so probably for "*Rabboni*"]. He, disappearing, commands her, "*Noli me tangere!*" Then appearing on the right side of the altar, and passing in front of it, says, "*Averte! nolite timere,*" and vanishes. The women joyfully bend to the altar, and, turning to the choir, sing "*Alleluia! resurrexit Dominus; Alleluia.*" Then the archbishop or priest before the altar, with thurible, in a loud voice, begins the "*Te Deum laudamus.*"

At Zurich (dating from c. 1260)[c] two of the most eminent of the canons, representing SS. Peter and Paul, and wearing chasubles, made semblance of running to the altar of the martyrs, the younger of them passing the other; the canon personifying the angel then took the white linen, and all three, showing it to the people and clergy, sang, "*Vous voyez, bons compagnons,*" *&c.*

The music, even, to which the parts of the several performers were sung, has been preserved in various instances.[d] Examples occur in manuscripts now in the Imperial Library at Paris, dating in the middle of the thirteenth century, at Tours, and at Orleans, both of the twelfth century, and at Cividale (Friuli) in a Processional of the fourteenth century.

A representation of the resurrection by means of puppets was given at Witney, Oxfordshire, as described by Lambarde; though it is necessary to bear in mind that he evinces throughout his writings great virulence against various observances which he looked upon as superstitious. His account runs thus :—[e]

[a] Ducange, *Glossarium*, fol. ed. Paris, 1736, vol. vi. *s.v. Sepultura Crucifixi.*

[b] In the Orleans MS. he is "dalmaticatus candida dalmatica, candida infula infulatus, philacteria preciosa in capite, crucem *cum labaro* in dextrâ, textum auro paratorium in sinistrâ habens." (Coussemaker, p. 186.)

[c] Migne, *ut supra.*

[d] Coussemaker, *Drames Liturgiques*, pp. 178, 186, 250, 298.

[e] Lambarde's *Alphabetical Description of the Chief Places in England and Wales*, 4to. London, 1730, p. 459, *s. v.* Wytney.

In the days of ceremonial Religion they used at Wytney to set forthe yearly in maner of a Shew or Enterlude the Resurrection of our Lord and Saviour *Chryste*, partly of Purpose to draw thyther some Concourse off People that might spend their Money in the Towne, but cheiflie to allure by pleasant Spectacle the comon Sort to the Likinge of Popishe Maumetrie, for the which Purpose and the more lyvely thearby to exhibit to the Eye the hole Action of the Resurrection the Preistes garnished out certein smalle Puppets representinge the Parsons of Christe, the Watchmen, Marie, and others, amongest the which one bare the Parte of a wakinge Watcheman who (espiinge Christ to arise) made a continual noyce like to the sound that is caused by the Metinge of two Styckes, and was therof comonly called *Jack Shacker* of Wytney. The like Toye I my selfe (being then a Chyld) once saw in *Poules* Churche at London at a Feast of Whitsontyde, where the comynge down of the Holy Gost was set forthe by a white Pigion that was let to fly out of a Hole that yet is to be sene in the mydst of the Roofe of the great ile; and by a long Censer, &c.

From the slight existing notices of such ceremonies as those described by Lambarde, there appears reason to believe that they were local and almost unique.

At Durham no such performance took place, but the description of the custom there is very complete and curious.[a] Between 3 and 4 o'clock on Easter morning, two of the oldest monks of the quire, each with a pair of silver censers, came to the sepulchre with great reverence, and took out the Image of Our Saviour representing the Resurrection previously described. Then, after the elevation of the said "picture," they carried it on a fair embroidered velvet cushion, and, with the choir singing the anthem *Christus resurgens*, brought it to the high altar. After which they carried it in procession round the church, beneath a most rich purple velvet canopy borne by four ancient gentlemen, and attended by the whole choir with goodly torches and great store of other lights, back to the altar, where the said image remained until Ascension Day.

Although performed under rubrical directions, such ceremonies seem at first sight scarcely distinguishable from mysteries. Precision in language was not in the Mediæval period usual or so necessary as now. Many expressions were then interchangeable which now have a precise and special meaning, and, in default of any authoritative definition of a mystery or miracle-play, doubt may be raised as to the class in which this ceremony should be placed; but I think we may fairly draw a distinction. This is a dramatic ceremony performed partially in appropriate costume, or rather by an adaptation of the ordinary costume, but limited to a representation of scenes of scripture history, and expressed in scripture language. On the other hand, a mystery may be described as a performance in which

[a] *Cosin MS.* in Durham Library, written between 1620 and 1630; printed by the Surtees Society, xv. 10, having been previously printed in the work known as Davies' *Rites of Durham*, p. 22.

the scripture history is paraphrased, and amplified, and supplemented by the aid of fancy and imagination, and probably almost, if not always, performed in some out-door natural amphitheatre.

The writer of the Dictionnaire des Mystères in Migne's Encyclopædia[a] makes a similar division of the ceremonial into two distinct sections, viz. :—

1°. *Les rites figurés.*
2°. *Les représentations dramatiques.*

He says that, in spite of the efforts of the higher clergy, these representations were introduced into the churches, and persisted in almost to the present day; and that the laity had endeavoured, at least from the twelfth century, to introduce, though with a pious object, the emotions of the theatre. But the church always, so far as possible, restrained them within strict limits.

The same distinction has been drawn by De Coussemaker[b]:—

Les mystères étaient réprésentés sur un théâtre proprement dit, et par des acteurs laïques ; il s'y introduisit peu a peu des choses étrangères qui les conduisirent promptement à leur complète sécularisation.

Les drames liturgiques, au contraire, n'eurent pour scène que les églises et les monastères, pour acteurs que les clercs monastiques ou séculiers. Ces jeux dramatiques n'ont jamais été composés dans un but théâtral.

A curious passage occurs in Robert de Brunne's severe condemnation of sins of all kinds (dated c. 1303),[c] the tenor of which appears to be that, in his opinion, performances such as that of the Resurrection and the Nativity were permissible if in church (*i. e.*, as acts of devotion), but not in "weyys or greuys;" and he objects to miracle-plays altogether.

Hyt is forbode hym, yn þe decre,[d]
Myracles for to make or se ;
For myracles ȝyf þou bygynne,
Hyt ys a gaderyng, a syghte of synne,
He may yn þe cherche þurghe þys resun
Pley þe resurreccyun,—

[a] Migne's *Encyclopédie* (*Dictionnaire des Mystères*), xliii. 848.

[b] Coussemaker, *Drames Liturgiques*, pref. viii.

[c] *Handlyng Synne*, by Roberd de Brunne, edited by Mr. Furnivall (Roxburghe Club, 1862), p. 146.

[d] It has been suggested that the gloss to the passage of the Decretals referred to in the next page may have been in the author's mind. The gloss runs thus:—"Non tamen hic prohibetur repræsentare presepe Domini, Herodem, Magos, et qualiter Rachel plorabat filios suos et cætera quæ tangunt festivitates illas de quibus hic fit mentio, cum talia potius inducant homines ad compunctionem quam ad lasciviam vel voluptatem; sicut in Pascha, sepulchrum Domini et alia repræsentantur ad devotionem excitandam."

Þat ys to seyë, how Gode ros,—
God and man yn myȝt and los,—
To make men be yn beleuë gode
Þat he has ros wyþ flesshe and blode;
And he may pleye wyþouten plyghte
Howe god was bore yn ȝolë nyghte.
To make men to beleue stedfastly
Þat he lyghte yn þe vyrgyne Mary.
ȝuf þou do hyt yn weyys or greuys,
A syghte of synne truly hyt semys.

It is quite possible that the Mystery, instead of the rubrical ceremony, may have been sometimes performed in the church, as mentioned and forbidden by Pope Innocent III. in a decretal epistle addressed to the Bishop of Leghorn,[a] commencing—"*Interdum ludi fiunt in ecclesiis theatrales.*" And the practice is censured by an Anglo-Norman poet in the 13th century, in the Harleian MSS. N. 273, fol. 141, translated by Mr. Norris[b]:—

The foolish clerks have invented another open folly, called miracles: these fools disguise their faces by masks, which is forbidden in the Decretal (*i.e.* of Pope Gregory IX. which forbids the clergy to attend plays or wear masks): the greater is their sin. They make representations; but let it be done discreetly, during the office of Holy Church, in the time of Divine Service, shewing Jesus Christ, the Son of God, placed in the tomb, and the Resurrection, for increase of devotion. But when they meet, like maniacs, in the city streets, or in the churchyards, after dinner, a time when fools love to congregate, they may say they do it for a good purpose, but you must not believe them.

A synod of the diocese of Worms, in 1316,[c] directed that the performance in church should be previous to the admission of the people:

Ut Resurrectionis Mysterium, ante ingressum plebis in ecclesiam, deinceps peragatur, debita cum devotione et reverentia.

Whitaker, in his *History of Richmondshire*,[d] speaks of the permanent structural sepulchre serving for the "paschal play of the Resurrection;" but he gives no authority, and probably only refers to that mentioned in the *Concordia Sancti Dunstani*.

More recent mention of mysteries, written with a very evident *animus*, must,

[a] Decretalium Gregorii IX. lib. iii. tit. i. *De Vita et Honestate*, c. xii. *quum decorem*.

[b] *The Ancient Cornish Drama;* edited and translated by Edwin Norris, ii. 442.

[c] Syn. Dioc. Worm. ap. Harzheim, t. iv. p. 258; quoted in pref. to Wright's *Early Mysteries*, p. xiii. n.

[d] Vol. i. p. 5.

therefore, be received with caution and allowance. The following would appear (but not certainly), from the reference to singing-bread, to relate to a performance in church [a]:—

> Besides, with images the more their pleasure here to take,
> And Christ, that everywhere doth raigne, a laughing stock to make,
> An other Image doe they get, like one but newly deade,
> With legges stretcht out at length, and handes upon his body spreade.
> And him, with pompe and sacred songe, they beare unto his grave,
> His bodie all being wrapt in lawne, and silkes and sarcenet brave;
> The boyes before with clappers go, and filthie noyses make:
> The Sexten beares the light; the people hereof knowledge take,
> And downe they kneel, or kisse the grounde, their hands held up abrod,
> And, knocking on their breastes, they make this wooden blocke a God;
> And, least in grave he should remaine without some companie,
> The singing-bread [b] is layde with him, for more idolatrie.
> The priest the Image worships first, as falleth to his turne,
> And frankencence, and sweet perfumes, before the breade doth burne:
> With tapers all the people come, and at the barriars stay,
> Where downe upon their knees they fall, and night and day they pray,
> And violets, and every kinde of flowers, about the grave
> They straw, and bring in all their gifts, and presents that they have:
> The singing men their dirges chaunt, as if some guiltie soule
> Were buried there, that thus they may the people better poule.

And the following is an account (if, or in so far as it may be, correct) of a foreign usage [c] also within the church:—

Christ hath not done any thing in his death and passion but they do play and counterfeite the same after him, so trimly and lively that no plaier nor juggler is able to doe it better. In some places they make the grave in a high place in the church where men must goe up many steppes * * * and there do walke souldiers in harnesse as bright as St. George, which keepe the grave till the Priests come and take him up; and then commeth sodenly a flash of fire wherewith they are all afraid and fall downe; and then up startes the man, and they begin to sing "Alleluia" on all hands, and then the clock striketh eleven.

[a] Barnaby Goodge's account of Good Friday, in the English version of *Naogeorgus*, fol. 51 b, quoted in Brand's *Popular Antiquities*, 4to. i. 130.

[b] Singing Bread.—The round cakes or wafers intended for the consecrated host in the eucharistic Sacrament.—Halliwell's *Dictionary of Archæology*. "Sacramental bread be made and formed * * as the usual Bread and water heretofore named Singing Cakes, which served for the use of the private Masse." —*Injunctions of Queen Elizabeth*, 1599; Sparrow's Collection, p. 79.

[c] *Beehive of the Romish Church*, translated into English by George Gilpin, sen. 1636, p. 206.

But from various references the play would appear to have been performed on some stage or scaffold erected for the purpose, and not to have been in the church; in fact, there could not have been sufficient space in the sepulchre for all the characters introduced, nor would it have been visible to more than a very limited audience. The entries in the churchwardens' accounts at St. Laurence, Reading, state particularly that the play was in the Forbery, which is a plain forming an outer court of the Abbey, and bounding St. Laurence's Churchyard; and a hill on one side, still called the Forbery Hill, afforded an excellent place for spectators.[a]

These items will suffice for the purpose:

1507. It. paied to the laborers in the Forbury for setting up off the polls for the scaphold . . . . . ix[d]
It. paied for bred, ale, and bere y[t] longyd to y[e] pleye in the Forbury . . . . . ij[s] j[d]

Among the parish receipts in 1499 are these, indicating that the Easter ceremonies and the play were on different occasions.

It. rec. of the gaderyng of the stage play . . . . xvij[s]
It. rec. at Estur for the Pascall[b]. . . . . xxxvij[s]

Several Cornish amphitheatres described by Carew and Borlase are of large dimensions: one at St. Just is an exact circle, 126 feet in diameter, with seven rows of seats all round, and still in good preservation.[c]

The Mystery of the Resurrection is exceedingly curious; it is, as usual, partly a paraphrase and partly an amplification of the account in Scripture. The existing copy of the *Coventry Mysteries* was written in 1468,[d] though what antiquity they might then have had can be only conjectured; but a mystery of this nature was performed by the cartwrights, carvers, and sawyers on Corpus Christi Day, 1415.[e] The existing text runs to the following effect.[f]

Caiaphas and Pilate confer about preventing the disciples stealing away the body, and Pilate gives charge to four knights, Ser Ameraunt, Arfaxat, Cosdran, and Affraunt, to "lete nether frend nor fo in no wey towche the ston."[g] The knights undertake the duty, and talk very loudly of what they will do.

[a] Coates's *Reading*, p. 272. [b] Referring to the great paschal candle. [c] Norris, *ut supra*.
[d] *Coventry Mysteries*, edited by Halliwell, pref. p. vi. [e] Sharpe's *Coventry Mysteries*, p. 139.
[f] Halliwell's *Coventry Mysteries*, p. 340. Hone's *Coventry Mysteries*, p. 338.
[g] In the sixteenth-century text of the Ammergau mystery, presently to be referred to, the knights are named Unverzagt, Wagsring, Helmschratt, and Wagendrüssel; and in another edition there is a fifth, named Schuereprant; but these are evidently fancy names of the same class as Greatheart and Ready-to-halt, or Jack the Giant-killer of more recent date.

Arfaxat— Let se, ser Ambraunt, where wele ye be ?
Wole ze kepe the feet or the hed ?
Ameraunt—At the hed so mote I the,
And ho so come here he is but dead.
Arfaxat— And I wole kepe the feet this tyde,
Thow ther come both Jakke & Gylle.
Cosdran— And I xal kepe the ryth syde,
And ho so come I xal hym kylle.
Affraunt— And I wole on the left hand ben,
And ho so come here he xal nevyr then.
fful sekyrly his bane xal I ben,
With dyntys of dowte. . . .

Tunc ibunt ad sepulcrum Pilatus, Cayphas, Annas (addressed as Syr Buschopp) et omnes milites.

The stone is then sealed and locked, and the party retire "to ther scaffoldys," leaving the knights.

Affraunt—Now in this grownde
He lyth bounde
That tholyd wounde,
ffor he was ffals.

This lefft cornere
I will kepe here
Armyd clere,
Bothe hed & hals.

Cosdran—I wyl have this syde
What so betyde
If any man ryde
To stele the cors;

I xal hym chyde
With woundys wyde
Amonge hem glyde,
With fyne fors.

Ameraunt—The hed I take
Hereby to wake
A stele stake,
I holde in honde.

Maystryes to make,
Crownys i-crake,
Schafftys to shake,
And schapyn schonde.

Arfaxat—I xal not lete
To kepe the fete;
They are ful wete,
Walterid in blood.

He that wylle stalke,
Be brook or balke,
Hedyr to walke,
Tho wrecchis be wood.

This chant over, they all successively complain of drowsiness—

Tunc dormyent milites, et veniet anima Christi de inferno cum Adam et Eva, Abraham, Johanne Baptista, et aliis.

After some conversation with them—

Tunc transiet anima Christi ad resuscitandum corpus, quo resuscitato, dicat Jesus, &c.

Afterwards—

Tunc evigilabunt milites sepulcri;

and, after some consultation, they agree to report the truth to Pilate that the Lord had risen.

The *Towneley Mysteries*,[a] probably rather earlier than the *Coventry Mysteries*, are very similar, but the conversations are more brief. Pilate gives his commands to—

Syr knyghtes that ar of dedes dughty,
And chosen for chefe of chevalry,

who undertake the charge, and thus arrange their positions—

Primus Miles— Who shuld be where, fayn wold I wytt.
Secundus Miles—Even on this syde wylle I sytt,
Tercius Miles— And I shall fownde his feete to flytt:
Quartus Miles— We there shrew ther;
Now by Mahowne, fayn wold I wytt,
Who durst com here

[a] *Towneley Mysteries* (Surtees Society), iii. 258. The date assigned by Douce (see preface, p. viii.) is Henry VI. (1422—61), or Edward IV. (1461–83); probably the earliest of these dates is correct.

This cors with treson forto take,
For if it were the burnand drake,
Of me styfly he gatt a strake,
Have here my hand;
To thise three dayes be past,
This cors I dar warand.

It would appear to have been performed on Easter morning. "The Wepinge of the thre Maries" was "a mystery to be played part on Gudfriday afternone and the other part opon Esterday afternone. The Resurrexion in the morrowe."[a]

The Cornish Mysteries run to the same general effect.[b]

At Rayleigh, Essex, the produce of the Church Goods sold in the reign of King Edward VI.[c]—

was bestowed by th' appointment of the seid parishyoners in the forme ensuying, viz. to the stage players that played at Raylegh on Trynyte Sondaye in A°. iiij°. dicti Regis, xx^{s}.: residue was bestowed about the reparacyons of the Corne Markett of Raylegh aforesaid whiche as then was lyke to fall.

Quaint as this Mystery was, irreverent as, from its complete discordance with modern associations, many may deem it, we should be unreasonable were we to antedate such associations, "nor can any one appreciate the character of the period when they were in use, with all its freshness and fearlessness of taste, as well as its rudeness, without attaining an imaginative sympathy with usages so deeply and largely characteristic of them. Our minds are expanded in proportion as we learn to understand how what would be unprofitable to one condition of society, may supply to another an aliment nutritious, because natural."[d]

Bishop Bale, who was consecrated Bishop of Ossory in 1553, and died in 1563, and who in his time was much persecuted by the Roman Catholics, wrote several Mysteries,[e] in one of which the characters are Pater Cælestis, Noah, Moses, Esaias, Adam, Abraham, David, and John the Baptist; and at the end of each act is a kind of chorus which was performed with voices and instruments. Another was entitled "A brefe Comedy or Enter lude, concernynge the temptacyon of our Lorde & Saver," &c.

[a] *Reliquiæ Antiquæ*, by Wright and Halliwell, ii. 125.

[b] Norris, *ubi supra.*

[c] *Church Inventories for Essex*; edited by Mr. H. W. King, about to appear in the Collections of the Essex Archæological Society, vol. iv.

[d] Critique on Longfellow's Poems in Fraser's Magazine, April, 1853.

[e] Dodsley's *Old Plays*, i. 9.

Among the peasantry of Southern nations, an earlier tone of mind than that now prevailing in England still continues; and to their impressionable character, so readily affected by the senses, childish in its ready faith and earnestness, some kindred ceremonies, still surviving the religious lifelessness and incredulity of high civilization, afford a depth of genuine Christianity hard to find amongst those who trust to reason rather than faith. The most important is the Mystery performed at Ober Ammergau[a] in Upper Bavaria every ten years, and witnessed by thousands of peasantry, assembled from the vallies for many miles around, with a deeply earnest religion difficult for us to realize. They sit out on long ranges of seats, closely packed, in the open air.

Acht Stunden lang dem Sonnenschein, dem Regen, auch wol einem Schneegestöber—das in diesen Hochthälern nicht allzuselten eintritt—ausgesetzt.

The performers, mostly belonging to the village, number about 350, including men and women as old as 80. The play was re-written and revised in 1520, in twelve acts, interspersed with tableaux, and lasts from 8 in the morning to 4 in the afternoon, and at its termination the performers fall on their knees and return thanks to God that the performance has well succeeded. Considerable extracts are given in Pichler's book on the Osterspiel.[b] Dr. Burney defines an oratorio as only a mystery in music.

What the construction of the Easter sepulchre really was we have no remains to show, nor, so far as I am aware, is there any representation of it, that is to say, of a structure of sufficient magnitude to contain the several persons engaged in the performance of such ceremonies as those described. There can be little or no doubt that it was a temporary wooden structure, framed so as to be easily put up when required, and afterwards removed, and that it stood on the north side of the choir or chancel. There are, however, numerous high or altar tombs set in a recess in the like position, which were probably inclosed within the framework, and served as the "sepulchre" itself; some of these were expressly intended for the purpose, as appears by documentary evidence, and that others were so intended appears very evidently from their sculptured decoration.

An entry in the parish accounts of St. Mary, Reading, indicate a permanent and a temporary structure, specifying, as two separate items of goods dis-

[a] *Das Passions-schauspiel im Dorfe Oberammergau in Oberbaiern; von Eduard Devrient:* Leipzig, 1851.

[b] Pichler, *Das Drama des Mittelalters in Tirol.*

posed of in 1551, or soon after, the sepulchre, which sold for 13*s.* 4*d.*, and a tomb of brick, which realized 12*d.*

The tomb itself was perhaps usually intended by the founder of the monument for his own place of burial.

Sir Thomas Tyrrell, Knight of the Shire of Essex, by his will, dated the 16th May, 1475,[a] directs—

> My body to be buried in the chauncell of the chirch of Essthorndon in Essex aforesaide, under the place where the sepulcre is wont to stonde their. And I woll that their be made a tombe of tymber or of stone for me and my wif accordyng honestly for oure degree.

Sir Rauf Verney 1478[b] directs as follows :—

> My body to be buried in the Church of St. Martyn pomerey in Irmongerlane of London, that is to wite, in the Toumbe standing under the sepulcre betwene the Quere and our lady Chapell of of the same Church;

evidently referring to the Easter Sepulchre.

Its ordinary if not invariable position was on the north side of the chancel, of which there is abundant proof; the following will suffice.

At Stanwell, Middlesex, Thomas Windsor, by his will, dated the 13th August, 1479,[c] directed his body to be buried in the north side of the choir of that church, before the image of Our Lady,—

> Wher the sepultur of our Lord stondith; whereupon I will ther be made a playne tombe of a competent hight to th'entent that yt may ber the blissid body of our Lord and the sepultur at the time of Estre, to stond uppon the same.

This tomb was only removed (quite unnecessarily) at a recent date.[d] It stood on the north side of the chancel, just east of the priest's door, and at the top of the sanctuary steps.

At Long Melford, Suffolk, the tomb of John Clopton, 1497, was similar, and employed for the same purpose, as described in the MS. of Roger Martin,[e] who died in 1580. He speaks of a frame of timber to hold a number of fair tapers, and set up on Maundy Thursday, "the sepulchre being always placed, and finely garnished, at the north end of the high altar, between that and Mr. Clopton's little chappel there, in a vacant place in the wall, I think upon a tomb of one of his ancestors. The said frame, with the tapers, was set near the steps going up to the said altar."

[a] Prerogative Registry, 31 Wattis. [b] *Ibid.* 1 Logge. [c] *Ibid.* 14 Logge.
[d] Represented in Gentleman's Magazine, 1793, lxiii. 993. [e] Gentleman's Magazine, 1830, ii. 206.

At Magdalen College Chapel, Oxford, dating between 1475 and 1480,[a] is a small vaulted recess on the north side of the altar, in which the tomb of the founder's father is now placed: it was originally built for the Holy Sepulchre, as appears by an inventory of the furniture belonging to the chapel, recovered and printed by the Rev. J. R. Bloxam.

Eleanor, wife of Sir Richard Townshend, Knight, by will dated 9th November, 1499, orders her body to be buried by the high altar, before our Blessed Lady, in the chancel of Rainham St. Mary, Norfolk, and a new tomb to be made for her husband's and her bones, upon which tomb to be cunningly graven a sepulchre for Easter Day;[b] and the tomb remains (probably still) on the north side of the choir of Rainham church.[c]

Sir Nicholas Latamer, who died 1505, by his will desired to be buried in the church of St. Mary the Virgin, Bookland (Buckland Abbas), Dorset, near the high altar, and in the place where the Sepulchre of the Lord is used to be placed.[d]

Sir Henry Colet, 1503, wills his body to be buried at Stebenhith (Stepney) if he decease there, at the Sepulchre before St. Dunstan if the vicary therof be so pleased.[e] This would be on the north side of the chancel.[f]

Thomas Lord Dacre, by his will dated in 1531,[g] directs as follows:—

My body to be buried in the parishe church of Hersemounceux in the North side of the high awter there, where the Sepulcre is used to be made, and one Tombe to be made and ordeyned convenient for the making and setting of the said Sepulcre, and apparell to be made and bought for the said Sepulcre at my cost and charge in the honour of the most blissed Sacrament.

The tomb still remains.[h] It is close to the east end of the wall, and consists of a high tomb and a rich canopy, and the space above the tomb and under the canopy is pierced through the wall into the north chantry. On the top are the full-length recumbent effigies of Lord Dacre and his son Thomas in armour. He died in 1534.

Thomas Carter, of Swynecombe, Oxon, 4th August, 1550, directs[i]

My bodye to be buryed in the parishe churche of Swynecombe aforesaid, at the high aulter ende, where the Sepulcre was accustomyd to stonde.

Sir Richard Southwell, Knight,[k] in 1561, directs his burial near the north door

[a] *Glossary of Architecture*, *s.v.* Sepulchre, *foot note.*
[b] Blomefield's *Norfolk*, vii. 132.
[c] Whitaker's *History of Richmondshire*, i. 5.
[d] Prerogative Registry, 29 Holgrave.
[e] *Ibid.* 41 Holgrave.
[f] Knight's *Life of Dean Colet*, p. 398.
[g] Prerogative Registry, 13 Hogen.
[h] *Sussex Archæological Collections*, iv. 191, where it is engraved.
[i] Prerogative Registry, 29 Bucke.
[k] *Ibid.* 10 Morrison.

of the chancel, and under the place where the sepulture was yearly wont to be set and made.

Dame Anne Packington,[a] 26th April, 1563, directs her burial

> At thende of the highe aulter whereas the Sepulture was used moste commonly to stande ;

(showing that the sepulchre was moveable). And examples might easily be multiplied.

The stone work and sculpture, forming the permanent part of the sepulchre, have been already fully treated of in the publications of this Society,[b] and therefore it will not be necessary to enter much into detail here. It was usually a high tomb within a large arched recess in the wall, and the lower part was more or less elaborately sculptured with a design representing, under a conventional type, our Lord stepping forth from the tomb, while the guard of Roman soldiers are sleeping, or dazzled, and powerless; and perhaps in the carving of the canopy are censing angels.

Heckington, in Lincolnshire,[c] furnishes the most remarkable example: it is of Decorated date. The upper part consists of three canopied arches, the centre of which is recessed, and the canopy is terminated by a representation of Our Lord risen: in the two smaller arches are sculptured, in relief, the Angel and the three Maries. The whole surmounted by a super-canopy and the background filled in with rich, very bold, flowing foliage. In front of the lower part, or tomb, a series of four canopies contains the four soldiers.

At Northwold, Norfolk,[d] is a triple-canopied high tomb, apparently dating from about 1460, with the soldiers at the base; in the back is a small cinque-foiled recess just above the slab, which might have held a pyx.

At Lincoln Cathedral,[e] on the north side of the choir, though the superstructure has been destroyed, there remain the three soldiers: this is of earlier date.

At Gosberton, Lincolnshire, is a sepulchre, stately and spacious;[f] at Holcombe, Devon,[g] is a similar sculpture in the north wall of the chancel.

In Richmondshire,[h] the combination of the tomb and sepulchre is very general; being an arch richly adorned with tabernacle-work.

Along the Rhine are various examples representing a sepulchre with the body of our Lord and the four Maries, or the seven weepers;[i] as at Andernach, Carden,

[a] Prerogative Registry, 10 Stephenson.
[b] *Vetusta Monumenta*, vol. iii.
[c] *Ibid.* plate 32.
[d] *Ibid.* plate 31; also engraved in *Norfolk Archæology*, iv. 120.
[e] *Ibid.* plate 31.
[f] *Ibid.*
[g] Polwhele's *Devon*, ii. 82.
[h] Whitaker's *History of Richmondshire*, i. 5.
[i] Webb's *Continental Ecclesiology.*

Frankfurt on the Maine, Münster, Maifeld, Oberwesel, Remagen, and Sinzig; and several in France may be mentioned, as at the Abbey of Issoudun, La Prée, and Bourges:[a] at St. Nicholas, Troyes,[b] was a sepulchre of Our Lord, of very beautiful workmanship, made in the form and of the dimensions of that at Jerusalem, the artist having made one, or two, journeys thither expressly for the purpose. At the Minor Friars, Antwerp,[c] is a precinct called the Sepulchre of our Lord.

The walls of the chapel of the Holy Sepulchre, in Winchester Cathedral,[d] a building of the Early-English period, are covered with paintings of the original date, representing scenes in the history of our Lord before, at, and after the Passion, but there is none, at all events now remaining, of the Resurrection.

A representation of our Lord's resurrection is engraven upon the following monumental brasses, some of which have certainly, and the others there is fair reason to believe, formed part of a sepulchral monument and Easter sepulchre combined:—

Swansea, to Sir Hugh Johnys, Knight, c. 1490:[e] formerly on a high tomb in the centre of the chancel, now in the pavement of the same spot. He was made knight at the Holy Sepulchre at Jerusalem, in 1441, which fact may account for the design in this example.

Great Coates, Lincolnshire, to Sir Thomas Barnardiston, A.D. 1503, now evidently not in its original position, being cross-wise in the chancel floor.

All Hallows Barking, London,[f] a tomb against the south wall, c. 1510. This may have been moved; but, if not, no doubt another than the ordinary position for the sepulchre would have been permissible where local circumstances required.

Narburgh, Norfolk,[g] to Sir John Spelman, 1545: this was in the usual position until the "restoration" of the church, since Blomefield's time.[h]

Slaugham, Sussex, to Richard Covert, Esq., 1547; in the usual spot, and canopied, and strongly resembling the tomb at Stanwell.

Cranley, Surrey,[i] to Robert Harding, Alderman of London, 1503, and wife

[a] Durand; *Voyages Littéraires de deux religieux Benedictins*, part I., pp. 21, 23, and 24.
[b] *Ibid.* pt. I. p. 93. [c] *Vetusta Monumenta*, vol. iii.
[d] *British Archæological Association Transactions, Winchester Congress*, 1845, p. 264.
[e] Bliss and Francis, *Account of the Monument*, Swansea, 1845.
[f] Engraved in Godwin and Britton's *Churches of London*, All Hallows Barking, p. 13.
[g] Engraved in Cotman's *Brasses of Norfolk:* described p. 41. [h] Blomefield's *Norfolk*, vi. 162.
[i] Engraved in Hussey's *Churches in Kent, Sussex, and Surrey, mentioned in Domesday Book* p. 325.

and child, with these scrolls: "(Have mercy Jhesu in the honor of) thy glorious resurreccion;" "And grant us the merite of thy bitter passion;" "Parentes accipe et infantem, bone Christe."[a] This, also, is evidently not in its original position; it lies in the pavement of the chancel.

The scene represented by the engraving in all these examples consists of a high-tomb, out of which our Lord is stepping, while in His left hand He bears a long cross-headed staff and *vexillum* or banner, similar to that with which St. John Baptist is usually figured; around the tomb are the guard of Roman soldiers, varying from two to four, though four appears to have been the most correct number, as in the *Coventry Mysteries*, previously referred to.[b]

This treatment is strictly in accordance with a conventional arrangement, which was followed during many centuries, and of which an early instance dating from the Carlovingian period occurs on the shrine of St. Albinus at Cologne[c]: thence it is traceable through the grand revival of the art of painting under Giotto,[d] to Perugino,[e] and other more modern painters, and was a favourite subject for sculpture in *rilievo*. Amongst hundreds of others may be mentioned as examples widely separated by distance, a sculpture in a doorway tympanum at Leon, Spain; a painting at Sienna, Italy; and several at the Hotel Cluny, Paris.[f]

It happens somewhat singularly that there is scarcely an example given by Agincourt in his *History of Art*, whether in sculpture, painting, or illumination.

Another design very nearly allied cannot reasonably be doubted to have had reference, like the examples above mentioned, to the Easter Sepulchre. It differs from that design, inasmuch as it is a three-quarter figure of our Lord, seen above the edge of the tomb, quiescent and without the banner—rather, indeed, resembling "The Man of Sorrows" of art—and the soldiers are wanting. It may be called rather a devotional work than a representation. This is a very favourite subject in *Predella* paintings of the fourteenth and still more in the fifteenth and early in the sixteenth centuries; and the larger collections of works of this period (which we may call the "Gold-background period of art") such as at Sienna, Arezzo, and Florence, furnish abundant examples.

[a] Manning and Bray's *History of Surrey*, i. 541.

[b] *Coventry Mysteries*; Hone, p. 338, Halliwell, p. 340.

[c] Engraved in Jameson and Eastlake's *History of Our Lord*, ii. 264.

[d] *Ibid.* ii. 267. [e] *Ibid.* ii. 269.

[f] One of the latter, dating in the middle of the thirteenth century, is engraved in Griffiths' *Museum of French Monuments*, 1803. Our Lord is represented as stepping on to a prostrate soldier: an injudicious treatment of the subject, (though no doubt, intended to indicate a triumph over the powers of the world as well as of the grave,) of which there are other instances.

In English brasses are the following specimens of this treatment of the subject:—

STOKE CHARITY, Hants, to Thomas Wayte, Esq., 1482, beautifully executed. This is on a canopied high tomb in the south wall of chancel.

BURWELL, Cambridgeshire,[a] c. 1510; part of an exceedingly curious palimpsest brass, now commemorating John Lawrence, Abbot of Ramsey, 1542; at the present time it lies in the pavement in the middle of the chancel floor.

STOKE LYNE, Oxfordshire, to Edward Love, gentleman, 1535; fixed to the north wall of the chancel.

An example of this design in painting, with the addition of SS. Mary and John seated on the ground, is given in Jameson and Eastlake's *History of Our Lord.*[b]

A more curious subject is that represented on the brass at Macclesfield, Cheshire, to Roger Legh, 1506.[c] It has been torn from its slab and fixed on a board. In the foreground is an ecclesiastic, known by his triple tiara to be a Pope, kneeling before an altar on which is a chalice; and in the place of the *reredos* is a tomb with the three-quarter figure of our Lord, upright in it, being in fact a similar design to that last described. From the Pope proceeds a scroll, "a dampnac̃oe ppetua libera nos Domine:" and beneath is the following:—

The pardon for saying of v. pater noster v. aves and a cred is xxvi. thousand yeres and xxvi. dayes of pardon.

The legend runs that on a certain occasion, when St. Gregory the Great (Pope A.D. 590—604) was officiating at the mass, one who stood near him doubted the Real Presence; thereupon, at the prayer of the saint, a vision was suddenly revealed of the crucified Saviour himself.[d] Another explanation of the scene is, that it might have had, originally at least, reference to the fact of the Missal having been revised by him.[e]

The subject, which was technically termed the Mass of St. Gregory, was most popular in art from the beginning of the fifteenth century, in every variety of grouping and treatment.[f]

[a] Engraved in the *Cambridge Antiquarian Society's Publications*, 4to. series.

[b] Jameson and Eastlake's *History of our Lord*, ii. 364.

[c] Engraved in Burrough's *View of Popery*, p. 154.

[d] *Legenda Aurea*, lib. iii. (March). Jameson's *Sacred and Legendary Art*, i. 320.

[e] Jameson and Eastlake, ii. 369.

[f] Specimens are engraved in Jameson and Eastlake, ii. 370; and in Berjeau, *Catalogue des Livres Xylographiques*, p. 82, from an unique block-book printed at Bamberg; there is also an engraving of it by Albert Dürer.

An example, of a very similar character to that at Macclesfield, was discovered on rebuilding the church at Quat, near Bridgnorth, Salop,[a] being a painting, on vellum, nailed to a board, representing our Lord rising from the sepulchre, with this inscription, "Saynt Gregory and other Popes and byschops grantes sex and twenty thousand zere of pardon & thritti dayes to all that saies devoutelye knelyng afor y^is^ ymage fife paternosters, fyfe aves, & a cred;" and as another example may be mentioned the will of William Hoton, of East Brandon, dated in 1421,[b] whereby he leaves to the high altar of St. Katharine *j. tabilett cum ymagine de visione sancti Gregorii Papæ.*

Against the north wall of a south quasi-transept in Childrey church, Berkshire, is a tomb very similar to those at Cranley, Stanwell, &c., c. 1510; but the design, instead of our Lord's Resurrection, consists of the conventional representation of the Holy Trinity and of the deceased persons rising from their tombs at the last day. There may have been an altar in the transept, immediately adjoining the monument. A sculpture of the Resurrection occurs on a monument in the south of the chancel at Kingston-by-Sea, Sussex. Also upon the font at Shorne, Kent, but no doubt with a symbolical reference to doctrine. On the font at Southfleet, Kent, is the "Miracle of Bolsena"—a design sometimes mistaken for the Mass of St. Gregory.

The inscription on a brass at Sprowston, Norfolk, A.D. 1559,[c] may perhaps point to a like use:—

Whois bodies and soules God grant a joyful res'rexction;

and so this at Charwelton, Northamptonshire, A.D. 1496.[d]

En Thome ossa Andrewe haec continet fossa;
De terra facta p'tinus in terram redacta;
Civibus sanctorum me jungat rex angelorum:
Margeria consors sternitur sub isto coloso:
Animam set linquens deo sibi trino & uno:
Migrantes in spe tecum in eternum gaudere.

And at Hackney, Middlesex, the brass of Christopher Urswick,[e] on a canopied high tomb, now in the ante-chamber of the rebuilt church.

The founder's tomb very usually occupied a similar site to the sepulchre, being

[a] Camden's *Britannia*, Gough's Edition, 1789, ii. 409.
[b] *Wills and Inventories* (Surtees Society), ii. 66.
[c] Haines' *Manual of Monumental Brasses*, 1st ed. p. 89.
[d] *Ibid.* p. 122. Baker's *Northamptonshire*, i. 302.
[e] Haines' *Manual*, p. 28.

at the north west of the altar in a mural recess; and it seems probable that it may have, perhaps usually, served for both purposes, the effigy of the deceased (where there was one) being temporarily boarded over. This must evidently have been the case at Hurstmonceux, and at East Horndon.

Examples of tombs, or Easter sepulchres, in recesses in the north wall, will be found, amongst others, in the churches of St. Peter, Dorchester, Dorset; Writtle, Essex;[a] Tring, Herts; Cheriton and Hythe, Kent; Ravenham, Norfolk;[b] Stanton St. John, Oxfordshire;[c] Gorleston, Suffolk; Walton-on-the-Hill, Surrey, (external); Bosham, Catsfield, Eastbourne, Lancing, and Ore, all in Sussex; and in All Hallows Barking,[d] where, in addition to the canopied high tomb on the south side, with the brass of the Resurrection in the back, and of about the same date, there is a very similar tomb on the north side, with these two scrolls (now lost) from the effigies let into the back.

Ego resurgam et in carne meo videbo Jesum
Deum Salvatorem meum.
Qui Lazarum resuscitasti a monumento fetidum
Dona nobis requiem.

In the overwhelming majority of churches there is no such tomb-like recess, but we do find, very frequently indeed, a small arched, or square-headed, recess to the north-west of the altar, sometimes with a wooden door remaining, and always with the marks of hinges and bolt; this, which we commonly call an aumbry, would be extremely suitable as the depository for the pyx, or pyx and crucifix, and it seems exceedingly likely that it was intended to receive them in Holy Week rather than to entrust them (as must elsewhere have been the case) to the temporary wooden structure. Examples of such recesses on the north side of the chancel occur at St. Lawrence, Waltham, Berks; Wyke, Hants; Standground, Hunts; St. Martin's, Canterbury (with linen-pattern door), Barfreston, Northfleet and West Wickham, Kent; Boston, and many others in Lincolnshire; Putney, Surrey; Amberley, Pevensey, Rustington, Salehurst, and Sompting, Sussex. In other situations they are not common; though Hayes, Kent; Hellesdon, Norfolk; Chiddingfold, Surrey; and Pevensey, Sussex, will serve as examples in the south wall; while in the east wall are Hever, Kent, north of the window, the piscina

[a] Buckler's *Churches of Essex*, p. 204.
[b] Engraved in Boutell's *Christian Monuments*, p. 1.
[c] Engraved in the *Glossary of Architecture*, i. 334.
[d] Stowe's *London*, Strype's edition, fol. 1720, ii. 35.

being to the south; and on the south at Alford, Lincolnshire, and Sompting, Sussex (the latter of which has also a north aumbry) of Saxon date, and also a recess over the altar, probably a reliquary.

What the wooden structure was we only learn inferentially, and not from any English existing specimen, nor from any pictorial representations that I am acquainted with.

It would appear to have been a framework so arranged as to be put up each year, and taken down and stowed away again when the ceremony was over; which is indicated pretty clearly by incidental notices, and by the account of the ultimate fate of these articles of church furniture.

It is noteworthy that in the list of goods required by the constitutions of Walter Gray, Archbishop of York, dated 1250,[a] and of Robert de Winchelsea, Archbishop of Canterbury, dated 1305,[b] to be provided as a minimum for parish churches, there is no mention of a sepulchre, although the list is by no means a small one, comprising half-a-dozen service books, vestments, candles, altar-frontals, images, and osculatory; and in the long account of goods belonging to the Temple Church,[c] taken by Nicholas Pigott, one of the sheriffs of London, on the 10th of January, 1307 (1 Edward II.), there is no mention of a sepulchre, or clothes for it, or other appurtenances. It may, however, be observed, as causing some doubt of the completeness of these requirements and inventory, that neither make mention of organs.

Among the records of the expenses consequent upon its annual construction may be cited the following:—

1376. Norwich Cathedral.[d]—In the treasury accounts are payments of 2*s.* for making the sepulchre, and the wages of workmen for four days.

1457. In the will of Thomas Aleby, Rector of Kirkby in Cleveland,[e] is this passage:

> Lego fabricæ cujusdam sepulcri noviter faciendi vj^{s} viij^{d}. Item lego pro co-opertura ejusdem sepulcri quemdam pannum de serico.

And in 1484 Sir Charles Pilkington[f] leaves for the repairing and keeping up of the sepulchre of our Lord, at Worksop, five marks.

[a] Johnson's *Canons.* [b] Lyndwood's *Provinciale*, p. 251. Gibson's *Codex*. Johnson's *Canons.*

[c] In the Record Office; quoted in paper by Mr. Harrod on "Norwich Church Goods," *Norfolk Archæology*, v. 90.

[d] Accounts still preserved there, *Norfolk Archæology*, v. 12.

[e] *Testamenta Eboracensia*, ii. (Surtees Society, vol. xxx.) 210. [f] *Ibid.* 240 n.

In the accounts of the parish of Great Yarmouth,[a] 1465, are distinct payments for setting up, taking down, mending it, and fetching it in, and for a new house in the vestry to put the sepulchre in.

At Durham it is spoken of as being set up on Good Friday after the Passion.[b]

St. Stephen's, Walbrook, London.[c]

1476. "Paypur, nayles & paynt p̄ le sopokeyr canope," and subsequently for "hokes" and "nayles" for the sepulchre . iij^{d}

St. Mary at Hill, London.[d]

1493. Paide to Christopher Bechen for a p̄ of tymber containing 11 feate . . . . . j^{s} x^{d}
Item to William Pavys for werkmanshipp and settyng of the sepulcre . . . . . iij^{s} viij^{d}
Item for a plannks ende for the one ende . . . . vj^{d}
Item for a small quart next the wall behind the sepulcre . ij^{d}
Item to the smyth for 13 pynnes yryn . . . . iij^{d}
Summa vj^{s} vj^{d}

Another year.[e]
Payd for the sepulcre for divers naylls and wires and glu . ix^{d}. ob.
Payd to Thomas Joyner for making it . . . . iv^{s} . —
Also payd for bokeram for pennons and for the makynge[f] . xxij^{d}
Also payd for betyng and steynynge of the pennons . . vj^{d}
1509. For disseplynyng roddis and nayles for the sepulchre . ij^{d}
1516. For the chest to lay the sepulcre in . . . . . xiij^{s} iv^{d}

St. Martin's, Leicester.[g]

1546. Item for the red for y^{e} sepulcar ij. yere . . . . j^{d}

Leverton, Lincolnshire.[h]

1555. For maykkyng of the sepulkkure howysse . . . . iij^{d}
For payntyng of a clothe for the saym . . . . ij^{s}
For feycheyng of the sepulkcure clothe frome the paynt^{r} att Boston . . . . . ij^{d}

[a] Swinden's *Great Yarmouth*, p. 811.
[b] Davies' *Rites of Durham*, p. 22. [c] Parish Accounts (unpublished: communicated by Mr. Milbourn).
[d] Nichols, *Illustrations of Manners and Expences in Antient Times*, p. 92.
[e] *Vetusta Monumenta*, vol. iii. [f] Brand's *Popular Antiquities*, 4to. ed. i. 855 n.
[g] North's *Chronicle of St. Martin's, Leicester*, p. 55.
[h] Churchwardens' Accounts, *Archæologia*, xli. 361.

St. Helen's, Abingdon, Berkshire.[a]

1558.	Payde for making the sepulture	x^{s}	
	For peynting the same sepulture	iij^{s}	
	For stones & other charges about it	iiij^{s}	vj^{d}

That the sepulchres varied according to the size and wealth of the church, and were sometimes very large, and exceedingly elaborate and rich, is perfectly evident, as indeed one might expect. The grandest known sepulchre is that existing at Seville, in Spain (termed "El Monumento"), which is of the same temporary construction, though it contributes an important item to the ceremonies of that glorious cathedral, which rival the Easter ceremonies of Rome itself.[b] It is an enormous wooden temple, designed and executed in 1544 by Antonio Florentin, and originally consisted *only* of three stories, terminated by a cross; but subsequent additions were made in 1624 and 1688 which have injured the effect, and rendered the whole out of proportion, even for this cathedral (the nave of which is 145 feet high). Each story rests on twenty-four columns.[c] The first is of the Ionic order, containing in the centre the image of Our Lady of the Conception and other statues and bas-reliefs from the Old and New Testament; the second story is Corinthian, and in the centre is placed the monstrance containing the Host, around which are the evangelists and the twelve patron saints of Seville; the third story is composite, and contains devices from Ezekiel's Vision and the Apocalypse; and the fourth story is also composite, with the figure of the Holy Trinity in the centre, under an Iris, and beneath a cupola originally surmounted by a cross, for which a statue of *La Fé* was substituted in 1688. Older writers say that the monument used to be illuminated by 162 lamps and 722 wax candles; and even at the beginning of the present century there were 140 lamps and 441 wax lights, weighing 2,800 lbs.: 119 of the largest of them each weighing 18 lbs. When lighted up during the night of Thursday and Good Friday, after the Host is inclosed in the silver *custodia*, the effect is most marvellous, and there is nothing like it in Spain or Italy.

The large dimensions in some other localities may be gathered from the rubrical directions already quoted from the *Concordia* of St. Dunstan, and from Martene.

Its suitable maintenance was occasionally provided for by special guilds, as, for example, at Kirton-in-Lindsey, Lincolnshire, where was "the guild of the

[a] *Nichols' Illustrations*, p. 141.

[b] *Handbook for Spain*, *s.v.* Seville.

[c] *Descripcion del Templo Catedral de Sevilla*, pp. 153 and 193.

sepulchre of our Lord Jesus Christ."[a] The Roman rubric[b] directs the sepulchre to be ornamented as handsomely as possible, and to have a curtain, but not of a black colour, for the symbolic reason mentioned by Gavantus:[c]

Non igitur adhibeantur panni nigri: tum quia in horto sepultus fuit Christus, tum quia crastina die super calicem adhuc erit velum album, cum reportabitur ad altare majus; tum quia vivit vere Christus, etiam in repræsentatione mortis ejus.

And the rich decorations appear by many records.

Sarum Cathedral,[d] 1214-22:

Velum unum de serico pro sepulchro.

John of Gaunt, by will[e] dated 3rd February, 1397, bequeaths his bed-furniture, copes, tapestry, and "draps enbroudés pur la sepulcre"—"à ma trescheer compaigne Katerin."

1379. Sir John de Ledes, Rector of Methley, in his will,[f] bequeaths as follows:

Lego duo tapeta rubea dictæ ecclesiæ meæ pro reparatione sepulcri in die Parascues.

1390. And so Agnes de Harwood, by her will.[g]

Lego sepulcro in ecclesia de Blith j zonam cum argento harnesatam. Item lego ad idem ij. monilia.

That at Durham is spoken of[h] as "all covered with red velvett and embrodered with gold."

1422. Will of Roger Whelpdale, Bishop of Carlisle—[i]

Volo quod lectus meus, jam de novo steynet, cum toto apparatu cameræ, liberetur capellæ collegii Reginæ, pro diebus magnis, et potissime pro tempore Paschali, pro sepulcro Dominico, altari, et lateribus capellæ.

1440. Will of Joan Fitlyng—[k]

Volo quod unus pannus meus aureus cum nigro fundamento imperpetuum custodiatur per custodes fabricæ dictæ capellæ (St. Mary the Virgin, Hull), ad ornamentum Sepulchri Domini in Festo Paschali.

[a] *Proceedings of Society of Antiquaries*, 2nd series, i. 421.

[b] "Luogo proprio e convenevole ed ornarlo piu decentemente che sarà possibile con veli (ma non mai di color nero), e lumi." (*Uffizio della Settimana Santa.*)

[c] Gavantus; *Thesaurus Sacrorum Rituum*, pars iv. tit. viii. g.

[d] Rock, *Church of our Fathers*, iv. 103.

[e] Nichols's *Royal Wills*, p. 154.

[f] *Testamenta Eboracensia*, i. (Surtees Society, vol. iv.) 106.

[g] *Ibid.* p. 143.

[h] *Cosin MS.*, printed by the Surtees Society, xv. 10.

[i] *Testamenta Eboracensia*, iii. (Surtees Society, vol. xlv.) 68.

[k] *Ibid.* ii. 77.

1440. Sommerby, Lincoln :[a]

Itm. 2 clothes of gold, of read and grene, with all the honoumts for the sepulchre, and for other obetes, & 2 of white cloth of gold.

1449. The inventory of the goods of Sir John Clerk,[b] **chaplain of St. Mary Magdalen, *juxta Ebor.* :**

Unus pannus steyned de resurrectione Domini.

1465. Great Yarmouth :[c]

For mending an angel standing at the sepulchre.

St. Mary Redcliffe, 1470 :[d]

Item, That Maister Canynge hath delivered this 4th day of July, in the year of our Lord 1470, to Maister Nicholas Petters, Vicar of St. Mary Redcliffe, Moses Conterin, Philip Bartholomew, Procurators of St. Mary Redcliffe aforesaid, a new sepulcre well gilt with golde, and a civer thereto.

Item, An image of God Almighty rising out of the same sepulchre, with all the ordinance that longeth thereto (that is to say), a lathe made of timber and the iron work therto.

Item, Therto longeth Heaven made of timber and stain'd clothes.

Item, Hell, made of timber & iron-work therto, with Divels to the number of 13.

Item, 4 Knights, armed, keeping the sepulchre with their weapons in their hands; that is to say, 2 axes & 2 spears & 2 pavés.

Item, 4 payr of Angels' wings for 4 angels, made of timber, & well painted.

Item, The Fadre, the Crowne, & Visage, the ball with a cross upon it, well gilt with fine gould.

Item, the Holy Ghosht coming out of Heaven into the Sepulchre.

Item, Longeth to the 4 Angels, 4 chevelers.

Coldingham Priory :[e]

In empcione unius ymaginis pro Resurreccione.

An inventory of ornaments belonging to the church of St. Margaret Pattens, London, made in 1470,[f] **mentions among "Clothes for Ymages"**

A grete cloth of tapestrie werke to hang upon the Walls by hynde the Sepulcur;

And also

A steyned cloth of Sepulcur werke with the resurrection, the passion, and with other werkes.

And in another list of ornaments and gifts belonging to the same church, between 1479 and 1486,[g] **is the entry—**

Item, Anod[r] crosse for the Sepulcour havyng reliks therein.

[a] *Lincolnshire Church Inventories*, p. 183, edited by E. Peacock, Esq. F.S.A.

[b] *Testamenta Eboracensia*, ii. (Surtees Society, vol. xxx.) 151. [c] Swinden's *Great Yarmouth*, p. 811.

[d] Britton's *History of Redcliffe Church*, p. 47. [e] *Glossary of Architecture*, *s. v.* Sepulchre, note.

[f] Printed in the *Union Review*, May, 1867, v. 298. [g] *Ibid.* p. 301.

At Cranbrook, Kent,[a] in an inventory made in 1509, there are mentioned—

ij paynted clothes for y^e^ sepulker & a fronte to hang und^r^ y^e^ taperrs.

Chichester Cathedral,[b] beginning of the sixteenth century:

A Clothe of fyne arays with a border of Clothe of golde of Crystys passyon contayning vj yards dim. pro sepulcro, xiii^li^ vj^s^ viij^d^.

1520. Margaret Hawarden, of Chester, by her will[c] leaves as follows:

Item, unto the parish churche of Saynt Olave a small flaxen shete, ij towells of twill for the sepultur in tyme of Estur; a borde cloth of twill to be a alter cloth to the hye alter, &c.

Hurstmonceaux, Sussex.[d] 1531. Thomas Ffenys, Lord Dacre, wills that a tomb be there made for placing the Sepulchre of our Lord, "and apparell to be made and bought for the said sepulcre at my cost and charge, in honour of the most blissed Sacrament."

The Durham sepulchre[e] is described as "all covered with red velvett and embrodered with gold;" and the inventory of Lincoln Cathedral mentions the sepulchre there as having a white stained cloth of damask silk; and that at Lambeth was white.[f] The inventory of the plate, jewels, &c., at Ely Cathedral, 20th Nov. 1540, mentions a red pall for the sepulchre.[g]

In the will of Sir Richard Rede, of Redeborne, Herts, dated 27th March, 1559,[h] and proved 5th July, 1576, is the following clause:

I gyve unto the Cathedrall churche of St. Paule, in london, my litle embrodered Cloath wroughte with the Resurrection of our Saviour Christe Jesus, whiche I think was first made to hange aboute the middest of an Altare, about or beneathe, in the feast daye of the Resurrection.

Sir John Tyrell by his will, dated 20th February, 1540,[i] gives to the church of Little Warley, Essex, "all the clothes that be usyd about the sepulchar every year."

1548. Eastwood, Essex,[k]

Sold. A sepulcker of wood gylt, to Thomas Tyler of Rocheford . . x^s^

At Sowthe, and also at Fordingbridge, Hants,[l] was a sepulchre-cloth, yellow and blue satin of Bruges. The inventory of the goods of Dame Agnes Hunger-

[a] *Ecclesiologist*, June, 1868.

[b] *Gentleman's Magazine*, June, 1865, p. 768; communicated by Rev. Mackenzie E. C. Walcott, F.S.A.

[c] *Lancashire and Cheshire Wills and Inventories*, Chetham Society, li. 8.

[d] Prerogative Registry, 13 Hogen.

[e] *Cosin MS.* (Surtees Society) xv. 10: also (from the same MS.) Davies's *Rites of Durham*, p. 22.

[f] *Vetusta Monumenta*, vol. iii.; and Nichols's *Illustrations*, p. 137. [g] *Ibid.*

[h] Prerogative Registry, 20 Carew. [i] *Ibid.* 25 Alengar. [k] *Essex Archæological Collections*, iv. 219.

[l] *Inventories of Church-goods*; printed in *Church Review*, 27th January, 1866.

ford,[a] attainted in 1552, mentions "a canabe of a russet velvet, frynged with red & grene sylke, with all sylke thynkes belonging to the sepulker." The cloth at Farley, Surrey,[b] was of red and green silk; at Walton-on-Thames[c] it was of white and red satin: at Streatham[d] was a hanging of damask and silk: at Wimbledon[e] were "ij clothes of cors clothe of gold for the sepulchre:" and in the will of John Fitlyng, 1440,[f] occurs this direction :—

Volo quod unus pannus meus aureus cum nigro fundamento imperpetuum custodiatur per custodes fabricæ dictæ Capellæ (B. M. V., Hull,) ad ornamentum sepulcri Domini in Festo Paschali.

In the inventory of St. Paul's Cathedral, 6th Edward VI. (1552), are mentioned two rich cloths for the garnishing of the sepulchre, and two smaller of needlework, one of them of the Sepulchre and the other of the Resurrection.[g] At St. Nicholas Cold Abbey was a sepulchre cloth stained with the Resurrection.[h] In fact, the church inventories taken at this date comprise numbers of stained or painted cloths for the sepulchre. One at Stanbridge Magna, Essex, was ultimately sold for iij^{s}.[i] At St. Mary Colechurch, London,[k] the cover of the sepulchre was sold in 1552 for vj^{s} xiij^{d}; and there remained a frame of iron.

The ceremonies connected with the Easter sepulchre continued in use during a very long period of time. Their very early origin is evident from the mention in the *Concordia Dunstani* (previously noticed), which fixes A.D. 988 (the year of his death) as the latest possible date; and as they are then referred to not as a novelty, but as an established custom recorded with others in a semi-rubrical form, the date is carried back to a considerably earlier period.

Records of this ceremony from time to time may be traced down to the middle of the sixteenth century. On Good Friday, 1538, Bishop Longland, at the end of a sermon before Henry VIII. said :—

In meane season I shall exhorte you all in our Lord God, as of old custom hath here this day bene used, every one of you, or ye departe, with most entire devocyon, knelynge to fore our

[a] *Archæologia*, xxxviii. 362.
[b] *Surrey Archæological Collections*, vol. iv. p. 57.
[c] *Ibid.* p. 162.
[d] *Ibid.* p. 126.
[e] *Ibid.* p. 134.
[f] *Testamenta Eboracensia*, ii. (Surtees Society, vol. xxx.) 77.
[g] *Church Review*, 4th Nov. 1865.
[h] *Ibid.* 14th Oct. 1865.
[i] About to appear in *Essex Archæological Society's Collections*, vol. iv.
[k] Parish accounts (unpublished, communicated by Mr. Milbourn).

Saviour Lorde God, this our Jesus Christ which has suffered soo much for us, to whome we are soo muche bounden, whoo lyeth in yonder sepulchre, in honore of hym, of his passyon and deathe, and of his 5 woundes, to say 5 Pater-nosters, 5 Aves & one *Credo*; that it may please his mercifull goodness to make us parteners of the merites of this his most gloryous passyon, bloode, and deathe.

By Cromwell's Injunctions, 1538,[a] as already mentioned, the clergy were not to suffer any candles or tapers to be set before any image, but only the light by the rood loft, the light before the sacrament of the altar, and the light about the sepulchre; these were allowed to stand for the ornamenting the church and the solemnity of divine service.

This was, however, one of the first of the various ceremonies which were abolished in England about the period of the Reformation.

The Visitation Articles of Archbishop Cranmer, 2nd Edward VI. (1549),[b] inquire:—

Item. Whether they had, upon Good Friday last past, the Sepulchres with their lights, having the Sacrament therein.

Ridley and Hooper both reprobated the customs connected with the making of the Sepulchre: the former speaks as follows:[c]—

Thou must be contributor also to the charges of all their popery, as of books for Antichrist's service, of lights of the roodloft, of *the Sepulchre*, for setting up and painting of images, nay indeed, of idols; and thou must bear a face to worship them also, or else thou must be had by the back (imprisoned).

And in his Visitation Articles, 4th Edward VI. (1550), he inquires:[d]—

Whether any useth to hallow water, bread, salt, bells, or candles upon Candlemas day, ashes on Ash Wednesday, palms on Palm Sunday, the font on Easter Even, fire on Paschal, or whether there was any *sepulchre* on Good Friday.

While Hooper says:[e]—

The ploughman, be he never so unlearned, shall better be instructed of Christ's death and passion by the corn that he soweth in the field, and likewise of Christ's resurrection, than by all the dead posts that hang in the church, or are pulled out of the sepulchre with "*Christus resurgens.*" What resemblance hath the taking of the cross out of the sepulchre and going a procession with

[a] Collier's *Church History*, ii. 150.
[b] *Sparrow's Collection*, p. 29.
[c] *Ridley's Works* (Parker Society), p. 67.
[d] *Sparrow's Collection*, p. 37.
[e] *Early Writings of Bishop Hooper* (Parker Society), p. 45.

it, with the resurrexion of Christ? None at all: the dead post is as dead when they sing, "*Jam non moritur*," as it was when they buried it with "*In pace factus est locus ejus.*"

At St. Martin's, Leicester, the custom still prevailed in 1544, as appears by the parish accounts:[a]

> More oing to the Chirch the same day by Henry Mabley for the sepulcre light . . . . . x^{s}.

So at Minchinhampton in 1551:[b]

> Item to Rych. Rysley for watchyng the sepulker . . . . . xii^{d}.
> To John Long for watchyng . . . . . vi^{d}.

And in the same year that Minchinhampton continued the ancient usage, the not distant parish of St. Mary, Reading, destroyed the sepulchre itself. These entries occur in the accounts of St. Mary's, Reading, for 1551:[c]

> Receyvid of Henry More for the sepulker . . . . . xiij^{s}. iiij^{d}.
> Receyvid of John Webb for the toumbe of brycke . . . xij^{d}.

1552. In the certificate of the "lacke of sondere parcells of vestments," &c., of the late Guilds of Boston, 20 August, 1552,[d] is the following mentioned as sold:—

> Item a sepulchre with the appurt . . . . xxvj^{s}. viij^{d}.

At Barnes,[e] Surrey, an old sepulchre was sold with consent of the parish for 2*s.* 6*d.*; and at Wandsworth,[f] in the same county, broken timber and wainscot (probably the rood-screen) and the sepulchre were sold for 13*s.* 4*d.*

At St. Martin's, Leicester,[g] the sepulchre lights, *i.e.*, the metal of its lamps and sockets, were sold to "Rychard Raynford waying iij score and xv li., at iij^{d}. ob. per lib., xxj^{s}. x^{d} ob."

The church inventories taken in the reign of King Edward VI. show how general the wooden structures were. For example, at Downe, near Hayes, Kent, was a "sepulchre of wood;"[h] at Sunninghill, Berks, a "sepulchre of timber;"[i] at Barkeston, Lincolnshire,[k] one is described as of "lattes;" and those at Blyton, Lin-

[a] North's *History of St. Martin's, Leicester*, p. 29.
[b] Parish accounts quoted in North's *Leicester*, p. 56 n.
[c] *Coates' Reading*, p. 130.
[d] *Lincolnshire Church Inventories*, edited by Peacock; Appendix.
[e] *Surrey Archæological Collections*, iv. 92. [f] *Ibid.* p. 132. [g] North's *Leicester*, p. 57.
[h] *Church Inventories for Kent, Church Review*, 8th Sept. 1866.
Church Review, 30th Sept. 1865. [k] *Lincolnshire Church Inventories*, p. 39.

colnshire,[a] and Hanbury, Staffordshire,[b] were of wainscot; that at Eastwood, Essex, of wood, gilt, was sold for 10*s.*;[c] and in the Lincolnshire inventories they are not only frequently mentioned, but the fact of their being usual is more strikingly illustrated by the note that in two churches (Barholme and Dunsbie[d]) they had none. The same inventories probably may be taken as showing their ordinary fate. A few, indeed, were cared for, and the cloths converted to a covering for the communion-table, as at Wimbledon and Weybridge, Surrey.[e] Out of those in Lincolnshire about half were burnt, or broken, or sold, and defaced. One was burnt in melting lead, and another for the glazier, whilst the rest were mostly altered and converted to other purposes—some to make communion-tables, and others became presses, biers, hen-pens, steps, and necessaries.

The ceremony was gradually revived in the time of Queen Mary.

1554. In the Harleian MSS. No. 416,[f] is a note that this year commandment was given that in all churches in London the sepulchre should be had up again, and that every man should bear palms and go to shrift.

1555. The accounts of the parish of Leverton, Lincolnshire,[g] contain charges for making the sepulchre house, and painting a cloth for the same.

1558. In this year are the charges at Abingdon and St. Mary, Reading (previously quoted) for making, painting, and watching the sepulchre, and for stones and other charges about it.

1559, Jan. 29th. In the will of Randall Ward, of Mykyll Usburne, Richmondshire,[h] is this bequest:

> I gyffe to the churche ij buschells of barlye * * bestowed at y^e^ dyscrecõn off the churchewardons, and sett uppe a candell before the sepulcrur every yere, to be prayed for.

But the ceremony was soon again put down.

1560. Winterton, Lincolnshire:[i]

> Item the Jewes light, the pascall post, the sepulcre, the mayden's lighte were burned in the A°. 2°. Eliz.

[a] *Lincolnshire Church Inventories*, p. 52. [b] *Church Review*, 2nd Nov. 1867.
[c] *Essex Church Inventories*, *Essex Archæological Society's Transactions*, iv. 219.
[d] *Lincolnshire Church Inventories*, pp. 37, 73.
[e] *Surrey Archæological Collections*, iv. 157, 162. [f] *Church Review*, 24th Feb. 1866.
[g] *Archæologia*, xli. 361: quoted above.
[h] *Richmondshire Wills and Inventories* (Surtees Society, vol. xxvi.) p. 143.
[i] *Lincolnshire Church Inventories*, p. 164.

1561. St. Lawrence, Reading :[a]

> Receyved for the sepulchre . . . . . xxvj^{s}. viij^{d}.

a high value.

1565. In the Visitation Articles of Bentham, Bishop of Coventry and Lichfield,[b] art. 21 directs (among other things)—

> That you do abolish and put away clean out of your church all monuments of idolatry and superstition—as holy-water stocks, Sepulchres which were used on Good Friday, hand-bells, & all manner of idols * * * & that you dam up all manner of hollow places in your chancel or church walls.

1566. Belton, Lincolnshire :[c]

> Itm., a Sepulker with little Jack broken in pieces this year by the said churchwardens.

The fact of there being no example of a wooden sepulchre which has survived the general destruction shows the powerful prejudice against this Easter ceremony which prevailed at the time of the Reformation. Even with respect to the monumental brasses engraved with the Resurrection it will be observed that they have almost all been displaced, which is not likely to have happened accidentally.

A deep feeling of respect for the spot on which the sepulchre was accustomed to be placed continued in many minds for some time after the ceremonies had ceased to be observed. Thus for example :—

1559. Nov. 18th. (1st Eliz.) Thomas Burrell of Stetchworth, Cambridgeshire,[d] directs :—

> My boddie to be buried in the holly sepulcre in the churche of Sainte Peeter of Stetchwourthe.

1562. Dec. 20.[e] Richard Codington desires his burial on the north side of the chancel whereat the sepulchre in times past was accustomed to stand.

[a] Coates's *Reading*, 221.

[b] *Church Review*, 15th August, 1868.

[c] *Lincolnshire Church Inventories*, p. 46; "Little Jack" probably meaning the Pyx. Bishop Ridley had to defend himself for that in a sermon preached at "Paul's Cross" he had rebuked the unreverend behaviour of certain evil disposed persons who had fixed railing bills against the Sacrament, terming it "Jack of the Box," &c.—*Ridley's Works* (Parker Society), p. 265.

[d] Prerogative Registry, 31 Mellersh.

[e] Quoted in *Church Review*; but the reference to Prerogative Registry there given is incorrect.

1563. April 26. Dame Ann Packington, by her will,[a] directs—

> My bodie to be buried in that parrishe churche where it shall please God to ende my lief, or where my executors shall thinke mete, at thende of the highe aulter wheras the sepulture was used moste commonly to stande, if the roome and place maie be suffered; or els at thother ende of the highe alter.

1569. January 2. Sir William Wareham, by his will,[b] directs—

> My bodie to be buried in the chauncell of the church of Ocle (Essex) by the highe aultare where as the sepulchre was wonte to stand.

As a *resumé*. It has been first shown that the mediæval Easter sepulchre was intended for the purpose of commemorating our Lord's entombment by means of a rubrical rite, which in exceptional instances approached very nearly to a mystery. Next, that the structure was a temporary wooden one, richly decorated with hangings, set on the north side of the chancel (sometimes having a tomb or recess as a nucleus), wherein was deposited, in England, the reserved Host with a cross, from Good Friday to Easter morn, during which time a light burnt before it, and a watch was kept in remembrance of the guard of Roman soldiers. And, finally, that the custom was in use in this country at least from the time of St. Dunstan to that of King Edward VI.; that it was revived during the brief reign of Queen Mary, and afterwards it ceased to be observed in the English Church.

[a] Prerogative Registry, 10 Stephenson.

[b] Prerogative Registry, 1 Holney.

XIII.—*On the Opening and Removal of a Tomb in Winchester Cathedral, reputed to be that of King William Rufus. By the* Rev. James Gerald Joyce, B.A., F.S.A., *Rector of Stratfieldsaye, and Local Secretary for Hampshire.*

Read February 18, 1869.

A tomb, or more strictly speaking a stone coffin with a coped top, which for some centuries past has been described as the tomb of King William Rufus, in Winchester Cathedral, was opened, and its contents ascertained, by direction of the Vice-Dean (the Ven. Archdeacon Jacob) on August 27th 1868. Subsequently to the examination it then underwent, its position within the building was changed on the 15th September following. No previous notice of the transaction having been given, except to a few persons residing in the town of Winchester, I have to regret that it was not in my power to be present either at the opening or the removal. As an interest of no ordinary kind attaches to this monument, I have considered the matter to be of sufficient consequence to collect together a summary of the particulars. The tomb has long been reputed to be the resting-place of the first of the great line of English sovereigns of the present dynasty buried in England; but besides this, the fatality which caused his death, the mystery in which it was shrouded, the superstitious hatred of the man, which believed the wrath of Heaven to have followed him in the Cathedral where he lay, and to have hurled over his grave the ruins of the central tower, all contribute to invest with peculiar associations this venerable memorial; to which I have now to add another point of interest, namely, that an archæological question arises for solution as to the actual identity of the tomb so recently opened, and the remains it contained, with the tomb and the remains of the Red King.

I shall first describe the tomb itself, and the position it occupied up to September last, and will then give some particulars of the opening and removal.

The stone coffin is an oolitic block, which measures 7 ft. 5 in. in length, by 3 ft. 2½ in. in breadth at the head, and 2 ft. 4½ in. at the foot. The exact height to which its exposed part rose above the pavement, as it stood last August, is now difficult to ascertain, but it was about 1 ft. 5 in. Below the pave-

ment a portion was buried, hiding under the floor a chamfered plinth which had been worked all round it; and, to all appearance, the coffin had been thus let in to the ground in order to conceal the fact that this plinth was much defaced from having been chopped or broken away. Upon the oolitic stone rests a slab of Purbeck, coped in the form accurately described by Milner as the *dos d'âne*, or "ass's-back." This Purbeck slab has been polished, and rises along the ridge of its centre to a thickness of about 11 in. over the coffin. For reasons which will appear, it must be noticed, that this coped top is of very considerable solidity, and has been wrought to its present shape with much labour. It is one solid slab, but is carved so as to exhibit to the eye two members, one resting on the other; the upper of these resembles a coped lid or cover in shape, and has a slight flat fillet in relief bordering all its edges. There is no cross, and no trace of any inscription.



THE REPUTED TOMB OF WILLIAM RUFUS.
(From a Photograph.)

The position of this tomb, up to September last, was in the centre line of the choir, close to the foot of the steps which ascend directly to the Holy Table. It stood at a distance of about 15 feet westward of the lowest step, the foot of the coffin being toward the east.

On Thursday, August 27th, 1868, in presence of the Vice-Dean, Dr. Richards, the Senior Surgeon of the County Hospital, with three other medical men,

Mr. Colson, Architect of the Cathedral, Mr. Moody, Curator of the local Museum, and the Town Clerk, this interesting tomb was opened by the removal of the top.

The interior measured 6 ft. 8 in. in length, was about 20 to 22 in. in depth, and was shaped to receive the head. The coffin was found to contain human bones. These, however, were not in the state in which they had been originally deposited. They had undergone extreme displacement, a fact rendered evident by many proofs, but more particularly by the two heel-bones being discovered about the middle of the coffin. All the bones were removed carefully from the dust in which they were embedded, and were laid out, in their proper relation to each other, upon the pavement. The skeleton of a male, about 5 ft. 8 in. to 5 ft. 10 in. in height, but not quite complete, was thus obtained.

The following list of the remains is summarized from letters addressed by the surgeons present to the local newspapers :

The skull much broken, many fragments but 1 in. to 1½ in. in diameter, the two temporal bones, and the right orbit, nearly entire, the lower jaw broken into two unequal pieces, but, though incomplete, very massive; portions of sixteen vertebræ, only the two upper being tolerably perfect; parts of six ribs only; the pelvis-bones very imperfect; part of a collar-bone, the blade-bones, the upper and forearm, three wrist-bones, and some finger-bones. Of the lower extremities, the thigh-bones were present, but broken, the necks being separated from the shafts, and the knobs and corners injured as if knocked against hard substances; a knee-pan; parts of the small bones of both legs; the entire of one and portion of the other of the large bones; (one of the surgeons observed that the piece left of the right tibia was very much heavier than the whole of the left, which was very perfect,) the bones of the feet almost complete, and nine teeth remarkably sound and good.

It was considered by the surgeons who assisted at the opening that the violence done to these remains had taken place long after they were committed to the tomb. The smaller bones of the skeleton, such as those of the hand or of the foot, were scattered apart from each other, and were not found lying close together; they must therefore have suffered disturbance long after the flesh had left them. It appeared equally likely that the disturbance occurred at a date remote from the present time, as they were now in a state of advanced decay, and would not have endured any violence without becoming entirely broken.

Although the condition in which these remains were discovered shows not only that violence was done them, but that they were replaced without order,

yet the surgeons present have expressed their conviction that these bones are portions of one skeleton. The joints which were capable of being fitted together matched as one elbow, the bones of the feet, and the first two vertebræ; and moreover certain of the bones are of the same size, in pairs, and rights and lefts.

The coffin was entirely emptied of its contents, which were examined with great care. It contained, besides these relics of humanity, a quantity of dust singularly heavy in the hand, the weight of which was attributed to the presence throughout it of minute fragments of lead, described as being "bent, twisted, crystalline, and brittle." Dispersed through the dust were also particles of clothing, of various textures, of which a more detailed account follows; there was also found a small carved ivory head, remarkably similar to those which occur in Norman work, the purpose of which it is hard to divine; it has a socket-hole scooped in it at the end, and places for a rivet to pass through it, so as to fasten it. It is beautifully executed, and is of a greenish hue, as if stained by contact with bronze; it possibly might have formed the handle or knob of a very small knife worn in a sheath. (See Plate XVII.) A single small turquoise stone of oval shape, parted from the setting, was also found; and lastly, the fragments of a weapon, perhaps a boar-spear. These fragments consisted of an iron spear or javelin head, originally about 9 inches in length, but when found, in two separate pieces, much corroded; one, the point blunted, and the other, the socket, with the tapered end of the shaft still in it; also, the remains of the shaft itself, to the length of about 3 ft. 6 in., chopped into small bits, 2 to 3 inches long each. Some of these were chopped clean, but most were half cut and half broken; the fracture showed an oval section about $1\frac{1}{2}$ in. in the longer and 1 in. in the shorter diameter, and the shaft had been tapered toward the head.

Such is a summary of the contents of this most interesting tomb. I am indebted to the kindness of the Dean of Winchester (who was absent from the deanery at the time this examination took place, and who was not cognizant of it), and also to the courtesy of the Vice-Dean, for permission to exhibit some of these articles on this occasion. I am also indebted to Dr. Richards, one of the medical gentlemen who was present, for the following analysis of the fragments of clothing now laid before you:—

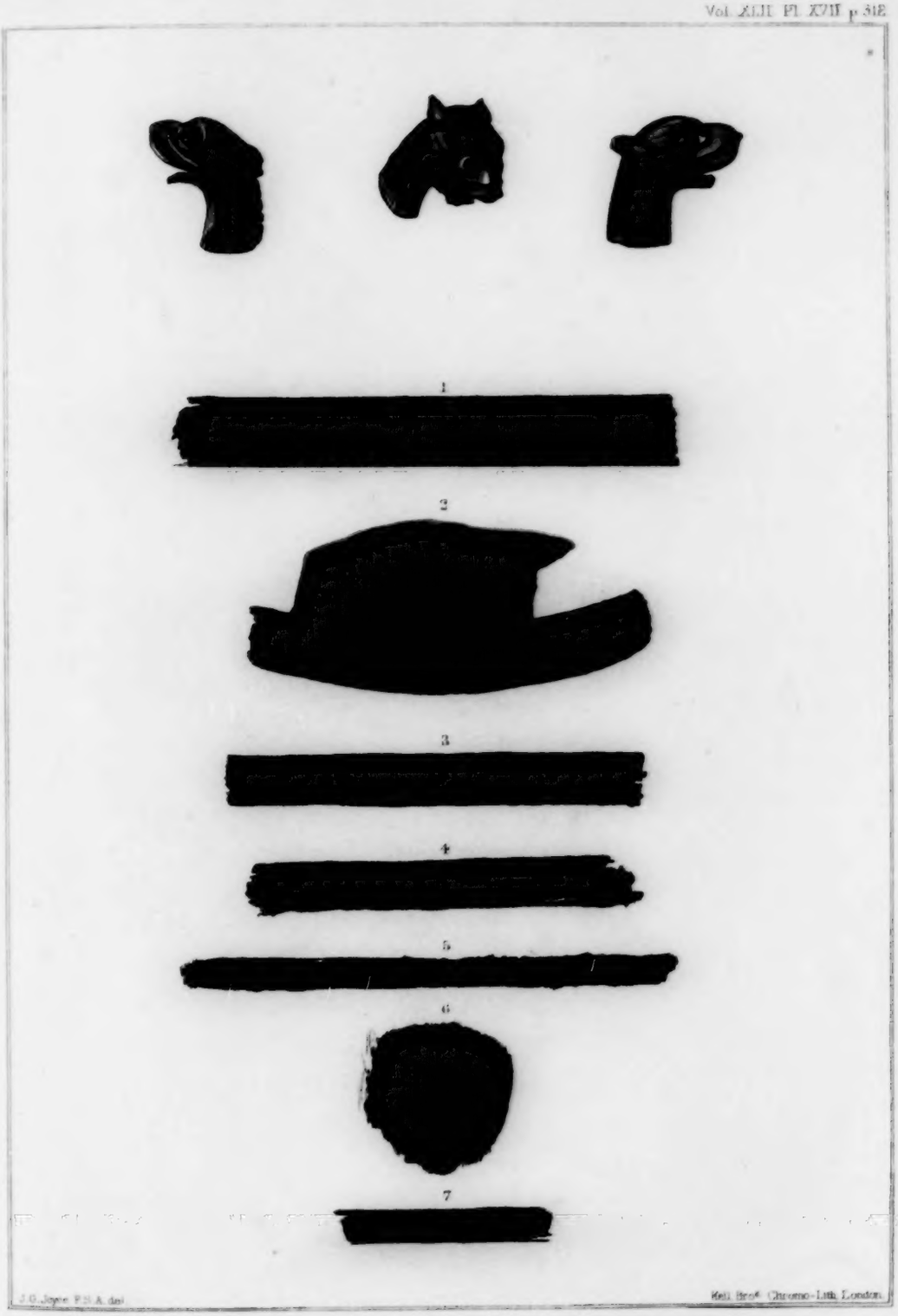
"1. Cloth, red-brown hue.

"2. Fine muslin, striped.

"3. Rather coarser muslin without stripe.

"4. Fine closely-woven muslin of firmer texture than the other specimens.

"5. Twilled material, something like serge in pattern, with fine threads.



CARVED IVORY HEAD AND FRAGMENTS OF GOLD TISSUES FROM A TOMB IN WINCHESTER CATHEDRAL.

Published by the Society of Antiquaries of London. 1870.

"6. Twill with coarser fibre, and of much thicker make.

"7. Closely-woven material like linen, with coarser threads running across at regular intervals.

"8. Thick firm cloth, resembling a stocking in make, covered with particles of mineral of a whitish glittering appearance.

"9. A ribbed braid of twisted threads.

"10. Seven different patterns of gold braid." (These latter are represented in Plate XVII.)

I have in the next place to describe to you very briefly the replacing of the body and the removal of the tomb to its present site. I shall do this in the words of a short report drawn up by Mr. Colson, architect of the Cathedral. Mr. Colson, after briefly stating the particulars already before you, goes on to say as follows:—

"The bones and remains were reverently returned to the tomb, and the lid cemented down; and on the 15th September, 1868, the tomb was carefully removed to the presbytery, and placed between the chantries of Bishop Waynflete and Cardinal Beaufort, being 108 feet eastward of the site it occupied on the 27th August, 1868.

"The tomb had doubtless been removed before, as it was found that the plinth had been hacked away and buried beneath the pavement line, and the mortar underneath was comparatively modern."

Before I now pass away from the particulars of the opening of this tomb, it is proper to mention that two or three pieces of mortar lay in the tomb with morsels of cloth and bone embedded, attributed to the last date when the Purbeck slab had been replaced over the remains. There were also found inside it some pieces of flat cork, a few nutshells, half a dozen iron nails with heads, some fragments of iron, some twigs with bark upon them, and some small pieces of trimmed wood the size of a pencil. In the bottom of the coffin were certain holes, whether meant to permit the exudation of moisture or to facilitate the removal of the stone was not clear, but a burrow directly beneath the site indicated that the nutshells, the twigs, and perhaps the pieces of cork, were in all probability to be referred to the presence of mice. The weapon, such as it was, was replaced with the remains when the top was cemented down; and I regret to add that no drawing has been preserved either of this, or of the appearance presented by the tomb itself upon being opened.

It is quite impossible to part with this venerable tomb without some remarks as to its identification.

The earliest authority for this stone coffin, standing where it did above the pavement of Winchester Cathedral up to September last, being styled the tomb of King William Rufus, will be found to be a manuscript in the handwriting of Henry Earl of Clarendon, bearing this title: "Some account of the Tombs and Monuments in the Cathedral Church of Winchester, finished this 17th day of February, 1683," and signed by that nobleman. This manuscript was the original list of these memorials which Gale thirty-two years after adopted and added to, as he states in his preface, which bears date 1715, "to which (MS.) there is now added a continuation of the inscriptions in the Church to this time."[a] There is evidence, therefore, to show that as far back as 1683 this tomb was undoubtedly accepted, and apparently without any question, as the actual stone coffin which had held the remains of the King. But it was then fully believed to be quite empty, and to contain no human relics. Gale's statement, taken, as it would appear, from the manuscript of Lord Clarendon, is in these words, speaking of the choir, "In the area, at the ascent to the altar, is a raised monument of greyish marble, in which lay interred William Rufus, before it was broken open and rifled in the late rebellion." He implies that William Rufus was not lying there when he wrote. He did not know that a body had been replaced within this coffin.

This violation of the tombs at Winchester is stated, in the inscription placed in 1661 upon one of the mortuary chests presently to be noticed, to have been committed in 1642; which date was but forty-one years before Clarendon's list was made. It is, therefore, within reasonable probability that, whatever other errors that list may have contained, Gale is at least not wrong in the description of what was found by those who had rifled this tomb. "In the tomb of William Rufus," says he, "which was broke open by the rebels in the time of the civil wars, was found the dust of that king, some relics of cloth of gold, a large gold ring, and a small silver chalice." However we are to reconcile the matter, these articles were believed by Gale and by Gale's informants to have been inclosed in the very tomb we are now discussing: and, assuming that the attribution of the tomb rested on some good authority, we find ourselves obliged to be ready with some explanation of the extraordinary fact, that a silver chalice, which was the peculiar mark of a priest's interment, was laid within the coffin of a king notorious even to his latest word ("trahe, diabole"—shoot away, devil) for his contempt of sacred things, and who is especially stigmatized by the

[a] Gale's History of Winchester.

chroniclers nearest his own date as having died, after a life of crime, by an instantaneous death, without the opportunity of being shriven, and without the *viaticum* and who left behind him the implicit popular belief that he was hurried untimely by an evil spirit (in the words of Matthew Paris[1], "ad judicium suum."

If we accept the finding of the silver chalice along with the body that reposed in this coffin when the rebels broke it open (which they unquestionably did), we must hesitate before we can reconcile ourselves to the belief that it was the Red King. King John, as we know, was buried in a monk's cowl, but that was a sort of fashion at his time; whereas there is no other instance that I am aware of, of a layman of vile character, and who died without the sacraments of the Church, being coffined with a vessel which has ever been held peculiarly sacred, and which, when found buried with the dead, is the symbol of the priesthood.

But leaving for the present the stone coffin and its Purbeck lid, Lord Clarendon and Gale equally appear to have overlooked the fact (for they were not really unaware of it) that the body of Rufus had been removed out of the tomb in which he was originally laid (whether this or another) many years before the civil war broke out.

There are two very trustworthy witnesses to this circumstance; the one is Stowe, who wrote at a time (1592) within the recent memory of the fact itself, and the other is the inscription upon the mortuary chest into which the bones of Rufus were translated (1525), and which inscription was repeated a second time (1661).

First, the evidence of Stowe. It is observable that, in his "Annales," he gives almost a literal version of the account of Rufus's death as delivered by the Latin chroniclers, and then subjoins a description of the tomb in which the body once lay, as it would seem from personal observation:—

"King William, on the morrowe after Lammas Day, hunting in the New Forest of Hampshire, in a place called Chorengham, where since a chappell was builded, Sir Walter Tyrell shooting at a Deere, unawares hit the King in the breast, that he fell down starke dead, and never spake worde. . . . . .
He dyed in the yeere of Christ 1100, & in the 13. yeere of his raygne, on the second day of August, when he had raygned 12 yeeres, 11 moneths, lacking eight days, & was buried at Winchester, in the Cathedrall Church or Monastery of Saynt Swithen, under a playne flat marble stone, before the lecterne in the queere, but long since his bones were translated in a coffer and layd with King Cnute's bones."

This is an extract from the quarto edition of Stowe's Annales, printed in London in 1592; and the translation of the bones of Rufus, to be laid beside

those of Canute, had taken place about sixty-seven years before, that is to say, about the year 1525. If the inscription upon the mortuary chest stood quite alone it might be supposed to have been an error which perchance might have crept in at a late date, in reproducing some older writing upon it; but, corroborated by this statement of Stowe, it is impossible to disregard it.

Next the evidence of the mortuary chest.

There are six of these chests; they stand three on each side of the upper portion of the choir, upon the lateral screens within which Bishop Fox inclosed this part of the church. Those at the end furthest from the Holy Table on both sides suffered more in the rebellion than the others, and on examination we observe that the inscriptions upon these are not the originals. Upon the third chest on the south side was originally inscribed (1525), according to Gale, "Hic jacent ossa[a] Cnutonis et Willelmi Rufi." The present version is as follows: "In hac et alterâ è regione cistâ, reliquiæ sunt ossium Canuti et Rufi Regum, Emmæ Reginæ, Winæ et Alwini episcoporum." The corresponding chest referred to shows that this altered form of title was placed there in 1661. It bears the inscription, "In hac cista A.D. 1661, promiscuè recondita sunt ossa Principum et Prælatorum, sacrilegâ barbarie dispersa, A.D. 1642." I quote this date (1661) to prove that it was then the belief that in replacing certain remains of the dead, disturbed sacrilegiously twenty years before, so far as they then identified any portion of them to be the body of William Rufus, they put them back within this particular chest to which they had been translated in 1525, and did not then transpose them to any other sepulchre, nor to the tomb now lately opened. It really cannot, therefore, with any fairness be denied that the repeating of the same attribution to Rufus for the second time in 1661 upon this chest, which has never since been disturbed, and the fact that it was repeated immediately after his remains were supposed to be recovered from their violation, afford a strong presumption that they did not lie in August 1868 in a stone coffin upon the floor of the same choir.

But in reality the question turns upon the fact, not of the rebels having dispersed the remains, but upon the truth or falsehood of the first inscription on this chest, placed there by Bishop Fox. The screens erected by Fox upon

[a] The inscription upon the first tomb of Canute is given thus in Milner (p. 58, quoted from "Trussel"):—

"Moribus inclutus jacet hic Rex nomine Cnutus."

This is stated to have been over his body when it lay buried before the high altar, the position occupied by the tomb hitherto assigned to Rufus. Canute's name, however, inscribed with others at the back of the choir wall (east), renders it doubtful whether the body lay in front of the altar.

which he put these mortuary chests are dated, as is well known; they not only have ciphers and badges sculptured on them, but the date 1525 is carved upon that which stands on the north side. I am not aware that any doubt has ever been cast upon the veracity of the inscriptions he ordered to be placed upon these receptacles of the mighty dead, nor had he any reason whatever to wish to mislead. Unless we are prepared to believe that this great prelate and noble benefactor of the Cathedral, the founder of Corpus Christi College at Oxford, was guilty of a purposeless and deliberate deceit, the remains of King Rufus ceased to repose in a tomb in 1525; and though there is proof enough that they were not permitted to rest where Bishop Fox placed them, there is not a shadow of evidence that they were at any time restored to a tomb. For anything that can be traced to the contrary, until Fox moved them they had been left untouched where they were laid at the first—that is to say, in the very centre of the choir, and beneath the middle of the tower. The words of William of Malmesbury imply also that the body was not laid in a tomb above ground, but was deposited in the earth; and I may add that Stowe's description applies far better to such a mode of interment than to an elevated coffin placed above the pavement. William of Malmesbury says, "Infra ambitum turris (cadaver) terræ traditum." Stowe's words are, that he was buried "under a plain flat marble stone."

Milner's authority is so deservedly great as to Winchester Cathedral that it is but right to say he accepts this tomb from Gale, as Gale had done from Lord Clarendon. He also supposed it to be empty.

It will now be quite evident that we have two entirely distinct questions: one as to the identification of the tomb; and the other as to that of the remains.

As to the coffin, it was not on its original site in August 1868. This is more certain from the mortar rubbish on which it stood, than from its being partially sunk, for the choir-floor might have risen round it by one pavement being laid over another. The oolitic block which forms the coffin was itself intended originally to stand above ground, as the chamfered plinth round its base distinctly proves. The coped slab of Purbeck above it points to the same intention; in fact, as I have already stated, the coped slab is worked in two members, one appearing as if it rested on the other, and the upper represents a lid or cover, so that under no circumstances could it have been buried in the middle of the choir so as to be laid level with the floor. Taking these points with us, if we are to assume its identity with the coffin of Rufus, we are bound to follow it back from where it was last year, and trace it into the past till we can replace it under the centre of the tower. Altered in position at some previous time

it certainly had been, but not between 1868 and 1683, and in 1683 it carried so great authority in its favour, that its authenticity does not seem to have been questioned. Going still backward we must conclude that no change in the position of this coffin occurred between 1683 and the Rebellion; therefore, what we arrive at as historical fact is this, that it emerges from the deluge of the Great Rebellion as a Royal tomb, robbed of its King. At this point we confront a difficulty. It had been then violated—its contents were remembered—the dead body, the ring, the chalice, the "relics of cloth of gold." It ought to have been empty. Who was the illustrious stranger occupying so remarkable a position in another man's coffin? We carry the research further back. It was occupied in 1642. Are we to conclude that it was empty in 1525? If Rufus's, it certainly was so. Bishop Fox had then removed the remains of Rufus to the chest upon the screen. If this stood there as an empty tomb under the tower in 1525, did he remove this tomb, when emptied, to where it lately stood? Fox made improvements in the choir, and carried his alterations over many years. It is certainly possible that this tomb, if standing above the pavement in the centre of the choir, might have been inconvenient, and if emptied of its remains, might have been removed; but in our anxiety to vindicate its authenticity we are at least bound to ask whether Fox was likely, after having translated the body of the Red King to the screen, to have brought the empty stone after the body which once filled it, and to have laid this cenotaph before the high altar of his Cathedral, in the most honourable place of all, in the very centre of his own improvements in the choir, merely in memory of a wicked king, and a notorious oppressor of the Church; whilst the dust of confessors and saintly benefactors slept around unhonoured by any such special mark of distinction. I feel that with the utmost wish to claim this as a royal tomb for the Cathedral Church of the diocese to which I belong, it is more honest to acknowledge that we have here lost our clue, and that unless some other evidence should happily come to light we have no certainty to allege. No one could in my opinion describe a body entombed within this coffin in the words Stowe has used, —which words, be it remembered, were written in the interval between Fox and the Rebellion,—that such remains were buried "under a plain flat marble stone." Failing other light than at this point, let us look for that which cannot mislead if rightly interpreted; let us examine the style and character of the tomb itself. To what age shall we refer these? Whether tenanted by Rufus or by another, is this tomb Norman or is it earlier? Upon this point I can but venture an opinion with great humility; my opinion however certainly is that the general

style and character of the monument may point to an age[a] even earlier than that of the second Norman king.

After having ventured to say so much about the stone coffin, there can be but little which remains as regards the identification of the body. Yet there are arguments which might weigh with some,—the weapon found with the dust may have been, and indeed perhaps was, a hunting spear, so far there might be a possibility that Rufus was buried with the same weapon he held in his hand when the fatal arrow entered his heart; the ivory ornament is of very early date, not later than the Norman Dynasty, and it indicates that the remains in the tomb were of remote antiquity. The condition of the bones, in my judgment, points to the same conclusion, though not with equal certainty. But, on the other hand, if this be Rufus the King, how and when did he return to his original resting-place? And there is the evidence of one witness which cannot be omitted at this point, that, namely, of Henry Howard, Esq., of Corby Castle, who, on July 7, 1797, assisted by Mr. Hastings, a surgeon, and accompanied by several gentlemen, examined all the mortuary chests. Every one of them contained human remains, not one was empty; and, although in the cases of some, and particularly of the two we are now interested in, the bones did not exactly tally with the inscriptions, as there were no skulls in either, yet he found exactly the right number of skulls altogether when the contents of all six chests were examined, there being in all twelve skulls, so as to complete the lists written upon the outside. Now, we know all these chests to have been disturbed in the Rebellion, and, therefore, such evidence in 1797 is highly important, because the body of Rufus, if replaced after 1666 in his original tomb, must have been absent from the chest.

The truth is that the finding of any remains at all in this tomb is the real difficulty. Every one, whilst it was supposed to be empty, was content to

[a] The indications of a date are so faint and so few that I only venture to subjoin them in the form of a note. There is an entire absence of any cross or ornament on the Purbeck. The want of any inscription or cipher, or any such clue to identification, is mentioned by John of Exeter as a mark of tombs earlier than the Conquest. The general character of the coped or covered top is suggestive in shape of tombs of the Roman period, and the slender bands of flat filleting in low relief are rather Saxon than Norman in type. An engraving of a coped Roman tomb will be found in the later edition of Parker's *Glossary*, under "Tombs." A good example of a similarly shaped memorial is in the British Museum; a Roman tomb discovered in digging a place for the foundation of a church in the Minories: this is ornamented with sculpture in low relief, with a slender flat fillet (like that on the reputed tomb of Rufus), bounding the outlines of its sides and coped top.

regard it as once having been the resting-place of Rufus. But the presence of another there opens a new field. There is, I would submit, reason to conjecture that its present occupant filled it from the first, though rudely disturbed at the Rebellion. If it be so, he was probably an older inhabitant than Rufus, and may have had a place in the cathedral that preceded Walkelyn's. The evidences of an internal kind are too slight to raise argument upon them; I am permitted, however, to refer for comparison to a portion of gold edging exhibited to-night through the courtesy of Mr. Franks, by J. Henderson, Esq., F.S.A.,[a] which is singularly like that contained in this tomb, and the age of which carries us to the Saxon period. I may also venture to throw out a hint that the curious ivory ornament, whatever be the date of its workmanship, has assuredly lain for centuries in contact with bronze—it has become saturated with its colour. Such discolouration of ivory and bone we meet with occasionally in the case of Roman ornaments, as the hafts and chapes of swords and sheaths, and it requires ages to saturate such material; the use of a bronze implement, indeed, for any purpose would be an indication of extreme antiquity. I have not dwelt upon the ring, because, whilst Milner after Gale alleges such a ring[b] to have been taken out of this tomb by the rebels, it is open to uncertainty whether this be actually the one, and if it be, it assuredly was in company with the chalice, and so makes against Rufus, and in favour of a more saintly occupant.

It remains now only to say what I consider to be justly due, namely, that whilst my own prejudices as an archæologist and an ecclesiastic would have disposed me to resist, in any examination to which it might have been subjected, any change of position for this venerable tomb, yet the most careful and scrupulous reverence for the dead was shown by the authorities at the Cathedral. It must be remembered, too, that they have ample precedent in this our most ancient and time-honoured Church for such translations of the departed. From the days when St. Ethelwold inaugurated the custom by transferring the remains of Pirinus the Bishop from the north side of the high altar of Winchester to a shrine of silver and gold behind that sacred spot, almost every human body that

[a] *See* Proc. Soc. Ant. 2 S. iv. 242.

[b] The ring known as that found in this tomb is not of gold, but of bronze gilt. It is apparently intended for the thumb, very coarsely executed, and has a plain square imitation jewel, which is a very poor copy of a sapphire. A representation of this and other rings from tombs in Winchester Cathedral will be found in a plate at the end of the first volume of Woodward and Wilks' *History of Hampshire*; London, 1858—69.

reposed at the eastern end as conspicuous for sanctity or rank has been moved to some place different to that where it at first rested. Not to mention the extensive removal of bodies effected by Fox, Henry de Blois, one of the most memorable of all the great men who occupied this ancient see, set the chief example to the present vice-dean in his recent act, and was apparently placed in circumstances not entirely dissimilar. He "translated," the bodies of the Kings of the West-Saxons, and of their saints; and, says John of Exeter, "on account of the ignorance as to which were kings and which were bishops, and because no titles or inscriptions were upon their monuments, the aforesaid Henry laid in leaden coffins kings with bishops and bishops with kings, mixed together." In one particular the present vice-dean has done better than his great exemplar Henry, he has reverently returned to their own coffin the remains he found, and has replaced them there in more decent and honourable sort than that in which he discovered them.

XIV.—*The Scallop Shell, considered as a Symbol of Initiation into the Eleusinian Mysteries.* *By* H. C. Coote, *Esq. F.S.A.*

Read April 29, 1869.

The scallop shell has been found so curiously in connection with funereal memorials of antiquity as to suggest that something must have been meant by this strange juxta-position.

M. Alexis Ouwaroff, in his *Recherches sur les Antiquités de la Russie Mériodionale et des Côtes de la Mer Noire*, figures and describes a golden scallop shell which was found inside a Greek tomb in the Crimea.[a]

M. l'Abbé Cochet, in his *Nouvelles Particularités relatives à la Sépulture Chrétienne du Moyen Age*, relates that inside a Gallo-Roman coffin discovered at Angers were found several natural scallop shells over and under the skeleton therein deposited.

Mr. Roach Smith, in his *Collectanea Antiqua*, iii. 48, pl. 14, has described and figured a Roman leaden coffin found in London, upon the lid and sides of which are represented in relief a quantity of scallop shells.

Mr. Thomas Wright[b] mentions that similarly ornamented leaden coffins of the Roman period have been discovered at York and Colchester.

More recently three leaden coffins, also Roman, have been disinterred at Eastham in Essex, each containing a skeleton.

These coffins, as I myself witnessed, were abundantly ornamented upon their exterior with the scallop shell in high relief.

They are fully described in the *Transactions of the London and Middlesex Archæological Society*, ii. 267, and also in the *Transactions of the Essex Archæological Society*, iii. part 3.

I should not omit to state that the Abbé Cochet, in a letter which I had the pleasure of receiving from him some few years since, informed me that he was under the impression that Roman leaden coffins having this ornamentation of the scallop shell, "des peignes en saillie," had been found in France.

[a] Quoted by M. Cochet in the pamphlet mentioned in the text, p. 17.

[b] *The Celt, the Roman, and the Saxon*, 2nd edit. pp. 113, 114.

The scallop shell being thus met with in its natural state as well as in effigy amongst the memorials of the pagan dead, it may be a fair inference that ornament was not its object or meaning even in those instances where it has that appearance, viz. upon the exterior of the coffins.

If it be not an ornament, I think that it may be a symbol, one which from the position in which we find it has especial reference to the departed and their condition. I am not, however, aware that any explanation of its object and intention, if it be a symbol, has been attempted, with one unimportant exception.

In the *Intermédiare des Chercheurs et Curieux*, 2^me^ *année*, p. 329, I ventured to express an opinion that it represented the *cœna feralis*, the sacrifice offered to the *manes*, because that *cœna*, if we may trust Juvenal (5 sat. v. 84,) consisted of shell-fish. I thought that the humble artist who constructed these sarcophagi had from the abundance of the materials of the sacrifice selected this shell to serve as a symbol of the *cœna* on account of its superior grace and beauty.

Still, as before, believing the escallop shell to be a symbol and not an ornament, I venture to suggest another explanation. The foundation of this view, such as it is, rests upon the following facts :—

Of all the ancient forms of religious practice the mysteries celebrated at Eleusis in honour of Demeter attracted the most enduring reverence.[a] This reverence was due to the belief that an initiation therein was a purification of soul and body such as would assure to the initiated a passport into a happier world of futurity.[b] In whatever way this belief (a *resumé* of the occult Eleusinian doctrine) was inculcated in the mysteries themselves, it is abundantly clear that the exterior world was blinded as regarded what passed therein with types and symbols only, freely because safely exhibited to the profane.[c]

The most prominent of all these types and symbols took its rise out of the following adventure of the goddess who founded the mysteries[d] :—Demeter, in the course of her travels in search of her lost daughter Persephone, arrived at Eleusis, where she was received under the roof of a woman named Baubo. This woman, being offended at the goddess's refusal to accept a cup of drink which she had offered her, first upbraided and taunted her guest, and then,

[a] Millingen's Baubo in the *Annali dell' Instituto di Correspondenza Archeologica*, vol. xiv. p. 72, *et seqq.* Roma.

[b] Ibid. p. 78. M. Ouwaroff in his *Essai sur les Mystères d' Eleusis* (p. 6): "En découvrant un point de médiation entre l'homme et la Divinité les Eleusinies avaient seules atteint le but de toutes les grandes associations religieuses."

[c] Millingen's Baubo, p. 79.

[d] Ibid. p. 80, *et seqq.*

further to show her scorn or her ill-humour, descended so far as to make a liberal exposure of her person in the goddess's presence. This act had an effect which might scarcely have been anticipated: it restored to the goddess her lost equanimity. And for this reason the act became prominently associated with the mysteries on their subsequent institution. Whatever may be thought of this tale as an origin or a *raison d'être*, it is absolutely certain that the object displayed by Baubo was venerated in the mysteries, was exhibited to the public, and was worn and carried about as a symbol of the profoundest significance.[a]

As the initiation in which this symbol took so prominent a part assured to the initiate a happy termination of his worldly existence, it would be at least appropriate that a reference should be made to it in the memorials of the dead who had been thus privileged.

Such a reference we do find in the celebrated inscription in prose and senarian verse of Vettius Agorius and his wife, now preserved in the museum of the Capitol.[b] In this case the wife had, amongst other prerogatives, been initiated in the Eleusinian mysteries (sacrata Cereri et Eleusiniis), her husband being hierophant on the occasion. She is accordingly made to say in the poetical part of the inscription—

> Tu me, marite, disciplinarum bono
> Puram ac pudicam sorte mortis eximens,
> In templa ducis ac famulam divis dicas.

Such expressions as these can mean nothing else than that assurance of eternal happiness, through the purifying process of the initiation, which I before suggested would be a fitting record to place upon the tomb wherein was deposited

[a] Millingen's Baubo, p. 87. The symbol is purely Greek, though the doctrines taught at Eleusis were most probably Egyptian. That distinguished antiquary, the Vicomte Emmanuel de Rougé (Conseiller d'Etat, et Conservateur honoraire des Monuments Egyptiens au Musée du Louvre), has observed in a letter to the writer: "Le pudendum m. est très rare dans les symboles Egyptiens. Et autant on trouve d'échantillons du phallus (qui figure souvent dans l'écriture hiéroglyphique), autant il est difficile de rencontrer la contre partie. Et encore le peu d'échantillons que je connais ne paraissent pas être plus anciens que l'époque Grecque. Par opposition à Ammon ithyphallique et à l' Horus de la même forme les déesses sont toujours absolument voilées en cette partie, et les voiles transparens qui dessinent leurs formes ne laissent rien apparaître au pubis." See also the *Notice Sommaire des Monuments Egyptiens exposés dans les Galeries au Musée du Louvre*, by the same high functionary. This work is a treasure of learning, enhanced by the graces of its style and the excellence of its method.

[b] Gruter, 1102, 2. Orelli, No. 2354. The same Agorius who discourses so pleasantly and philosophically in the *Saturnalia* (i. 17, *et seqq.*), and whom his friends affirm to be "unum arcanæ deorum naturæ conscium" (i. 24).

the mortal part of an initiate of these great mysteries, because such a person had a right to proclaim the assurance which he or she had therein received.

A symbol, however, would at times be more conveniently employed than an inscription.

But, though the object before mentioned might be paraded before the public on festal occasions, even pious candour would hesitate to place it upon the memorials of the dead. Accordingly, a substitute for this symbol was sought for, and was found in this manner.

To the object displayed by Baubo, the Greeks gave, in addition to any more common appellation which it may have had, the fanciful name of κτεὶς, though the usual acceptations of that word were—a comb, an instrument used in weaving, and a scallop shell,[a]—all the same meanings applying to the Latin *pecten*.

Now, the required substitute was contrived simply by employing one of the other meanings of the word κτεὶς.

This may seem a strange assertion, but it is undoubtedly true and provable as regards one of the meanings of this word, viz., the weaving instrument.

Millin in his *Peintures de Vases Grecs* has published several painted Greek funereal vases found in Apulia.[b] They have especial reference to the Eleusinian mysteries. They represent the happiness of the initiates in their state after death, and exhibit the various objects associated with the mysteries, prominent amongst them being the κτεὶς as the weaving implement.

To the distinguished archæologist James Millingen is due the identification of the κτεὶς as the weaving implement with the object displayed by Baubo.

He arrived at this conclusion from a small statue which he afterwards published, with a memoir of the highest interest, in the *Annali del Instituto di Corrispondenza di Roma*, xv. p. 72, pl. E.

This statuette represents Baubo in the attitude ascribed to her, holding in her left hand the weaving instrument figured on the Apulian vases.

She is also seated upon a boar, the victim used in purifications and expiatory sacrifices, and which, as an animal especially consecrated to Demeter, is figured upon the coins of Eleusis.[c]

In Millin's vases, as I have said, we have the κτεὶς *quâ* weaving instrument employed to express, by way of substitution, the other κτεὶς so strangely revered in the mysteries. But if an object representing one of the ordinary meanings

[a] Millingen's Baubo, p. 87.

[b] Vol. ii. p. 29. They are described by Millingen (Baubo, p. 88 *et seqq.*).

[c] Millingen's Baubo, p. 85.

of κτείς could be employed, as we thus see, in an Eleusinian sense quite different from its common and obvious signification, there would be nothing to prevent the use as an equivalent symbol of an object answering to another meaning of the same word, for example the scallop.

I therefore incline to think that the golden scallop found in the Crimean tomb, the natural shells found in the Gallo-Roman coffins, and the figures of the shell in relief upon the coffins disinterred in our own country and in France, are one and all the Eleusinian symbol, evincing, as on the Apulian vases, that the deceased persons to whom they refer were adepts of Eleusis. And it is no objection to this interpretation that one of the coffins found at Eastham is that of a child in years, for any child might be initiated in the smaller mysteries of Eleusis, while an only child had in its infancy the higher prerogative of being admitted to the privileges of the greater.[a]

[a] Millingen's Baubo, p. 86.

XV.—*Observations on the Roman Pilum.* By William Michael Wylie, *Esq.*, *M.A., F.S.A., Local Secretary for Hampshire.*

Read May 13, 1869.

Pila volunt, brevibusque habiles mucronibus enses.—*Silius Italicus.*

The Roman Pilum is a *quæstio vexata*, which has been, for ages, an embarrassment to all thinking men given to the study of classical literature.

Polybius first gave us an account of this wonderful weapon, which, in conjunction with the *gladius* and the military discipline of Rome, won for her the mastery of the world. It is a subject full of interest—it may be said of never-failing interest—for it had been abundantly discussed by the learned before the days of the celebrated Scaliger, and, according to M. Quicherat and his friends, "adhuc sub judice lis est."

Scaliger, as tradition runs,[a] deemed all that had been written on the pilum so unreal and so unsatisfactory, that he resolved on publishing his own views on the matter, and was engaged on this last labour at the time of his decease at Leyden, in 1609. Since that period much more has been written, equally unsatisfactory, and equally untenable.

In fact, till lately a real corporeal Roman pilum had been the great desideratum of the learned. Men had often enough dreamed of such a thing; but, as with dreams in general, "vanæ fingentur species." No one had seen a pilum, or, if haply seen, it had not been recognised. Minds were constantly running on the *one* catapultic marvel of Polybius, forgetful that he mentions also a second and lighter pilum; that time and occasion invariably bring change; and that Camillus, Marius, Cæsar, Vegetius, and, it may be, others, had their respective pila, all somewhat differing, and all equally well authenticated.

It has been reserved for our days to furnish a rational explanation of the weapon. For this we are, in truth, indebted conjointly to the judgment and

[a] Pitisci *Lexicon Antiq. Rom.* Leovardiæ, under the head *Pilum.*

[b] *Die Alterthümer unserer heidnischen Vorzeit*, 4to. Mayence.

[c] Lecture on the Pilum, in the *Verhandlungen der xxi. Philologen-Versammlung.* Heidelberg, 1863.

experience of Dr. Lindenschmit;[a] to the critical acumen of Dr. Köchly;[b] and the unwearied investigations of our august *confrère* the Emperor of the French, at Alise-Sainte-Reine,[c] which have been attended with such signal success. We have thereby obtained a complete identification of the weapon, such at least as it existed from the days of Cæsar down to a late period of the Empire. If any one, however, should fancy that unanimity had been at last obtained, the recent letter of M. Quicherat, in the Revue Archéologique,[b] may suffice to undeceive him. Still there remains to us that ancient difficulty bequeathed by Polybius.

Before we venture on our Polybian text, it may be well to consider what historical traditions exist of the use of the pilum, or similar weapons, among other Italic peoples. Although little may be gleaned, still that little will assist us in our conclusions, and no attempt in this direction seems to have been made before.

It is probable enough that a weapon, possessing some of the peculiarities of the pilum, may have long existed among the Sabines, and other tribes, close neighbours of the Romans, who, in this manner, may have been led to adopt it. To such a weapon Virgil alludes when he speaks of the "Volscos verutos."[c]

Again, we find another similar reference in the Æneid,

. . . . . pugnant mucrone, veruque Sabello,[d]

which has no little resemblance to the line of Silius Italicus before quoted.[e] Now we have the statement of Festus that the *pilum* and *verutum* were but synonymous terms.[f]

Virgil also places another weapon of this kind in the hands of the Rutilian Turnus:—

Sed magnum stridens contorta *falarica* venit,
Fulminis acta modo.[g]

Livy, in his especial mention of the Saguntine weapon, to which he gives the name of *falarica*, explains that, like the pilum, it had a long iron head. We also learn from him that the pilum head was quadrilateral, "*sicut in pilo quadratum.*"[h]

[a] Les Armes d'Alise, par M. Verchère de Reffye, in the *Revue Archéologique*, x. 337.

[b] Examen des Armes trouvées à Alise-Sainte-Reine, par M. Quicherat, in the *Revue Arch.* xi. 81. Also, the able reply of Dr. Lindenschmit in the same volume, p. 387.

[c] Georg. lib. ii. 168.

[d] Æn. vii. 665.

[e] Lib. viii. 373. "Pila volunt, brevibusque habiles mucronibus enses."

[f] Festus (De Verb. Sign.) Veruta pila dicuntur, quod . . . . . habent præfixa." Also Livy, lib. i. c. 43. "Arma mutata, nihil præter hastam, et *verutum* datur."

[g] Æn. ix. 705.

[h] Liv. lib. xxi. 18. "Falarica erat Saguntinis, missile telum hastili oblongo, et cetera tereti præterquam ad extremum, unde ferrum exstabat: id, sicut in pilo, quadratum, stuppa circumligabant linebantque pice.

In the dark corner of a glass case in the Bronze room of the Etruscan Museum at the Vatican Gallery lie *perdus* two very remarkable javelin-heads of *iron*, found in a tomb in the ancient Etruscan city of Vulci. These are very indifferently figured in the "Museum Etruscum Gregorianum" (vol. i. tav. xxi. fig. 6), and the incompetent writer of the letter-press of that magnificent work simply classes them as "*lancie e giavelotti;*" never even stating the fact of their being of iron. One of these is a round rod of some four feet in length, terminating at the one end in an ample socket, and tapering upwards to a slender quadrilateral cusp about half an inch in diameter, which forms five inches and a half of the total length. The other weapon is apparently broken, and the socket wanting. It resembles its companion, but is of far more substantial dimensions. The head is shorter, and an inch in diameter. These weapons are of undoubted authenticity, of which I have certain assurance from Barone Visconti, and the Commendatore Grifi, under whose official direction the museum was formed, and its invaluable contents preserved. They were found in the year 1836. It is not possible even to surmise to what part of the Etruscan period they may belong, for no records were kept of concomitant details, after the usual ruthless manner in which such tombs are rifled by speculators for the mere purpose of gain—not of science. Had these been barbed, they would have been good examples, in most respects, of the heavy and light pilum of Polybius. Whether or not we are to regard them as examples of the Virgilian *verutum*, or *falarica*, it is not unlikely that they were prototypes of the Roman pilum—in fact ἐπιχώρια δόρατα.

The very earliest mention of the pilum as a weapon of actual Roman warfare, that I can find, seems singularly well authenticated. It appears in a fragment of Ennius—"*Horatia pila*,"[a]—on the occasion of the victory of the Horatian brothers over the Curiatii, A. U. C. 85. This fragment has been, long subsequently, confirmed by Propertius in his lines on Ennius:—

> Et cecinit Curios fratres, et *Horatia pila*.[b]

Ennius probably wrote about A.U.C. 560, and any supposed obscurity in this

Ferrum autem tres longum habebat pedes, ut cum armis transfigere corpus posset. Sed id maxime, etiam si hæsisset in scuto, nec penetrasset in corpus, pavorem faciebat, quod cum medium accensum mitteretur, conceptumque ipso motu multo majorem ignem ferret, arma omitti cogebat, nudumque militem ad insequentes ictus præbebat."

The passage is a valuable illustration also of the usual tactic of depriving the enemy of his shield.

[a] Enn. *Annal.* ii. 25.

[b] Propert. lib. iii. 3.

fragment is removed by Livy, who explains at full that the "Horatia pila" were the martial trophies set up by the survivor of the Horatii, on his return from victory; and further, that these trophies had given their name to the spot where they had been originally so set up.[a] In fact it is certain that the spot retained its name for centuries after.[b] Dionysius of Halicarnassus, writing in the Augustan age, tells us the spot was marked in his time by a quadrilateral stone column—"*τὴν δ' ἐπίκλησιν ἣ στυλὶς φυλάττει τὴν αὐτὴν, Ὁρατία καλουμένη πίλα*"—against which column the ancient arms, then consumed by time, had once been placed.[c]

Next, in point of time, occurs the mention of the pilum, as an accustomed weapon in the Sabine wars, by Dionysius of Halicarnassus; in the war with the Boian Gauls, by Appian; and in the war with the Gauls again at Rome, by Plutarch. But these writers lived in times long subsequent to the events they have recorded; and, of all the classical writers, Polybius I believe was the first to give us, as an actual eye-witness, a detailed account of the pilum, or *ὑσσὸς*, as the Greek authors term it, used in the Carthaginian war. The other authors lead us to doubt whether they were not rather describing the weapon they themselves were acquainted with, rather than that in use at the early period of which they were writing. Thus, when Dionysius employs the *present* tense in his account of the pilum used in the Sabine war several centuries before—*ἔστι δὲ ταῦτα βέλη Ῥωμαίων*—he is probably merely describing the weapon of his own day.[d]

Polybius wrote about A.U.C. 600. A soldier himself, and companion of Scipio Africanus, he was consequently well acquainted with the weapon he undertook to describe.[e] He tells us there were two kinds of pilum in use at this period in

[a] Liv. lib. i. c. 26. "Spolia Curiatiorum fixa eo loco qui nunc *Pila Horatia* appellatur, ostentans."

[b] P. Victor, *De Regionibus Urbis Romæ*, places the *Horatia pila* in the viiith *Regio*.

[c] Lib. iii. 22.

[d] Lib. v. c. 46. "*Ἔστι δὲ ταῦτα βέλη Ῥωμαίων, ἃ συνιόντες εἰς χεῖρας ἐξακοντίζουσι, ξύλα προμήκη τε καὶ χειροπληθῆ, τριῶν οὐχ ἧττον ποδῶν, σιδηροῦς ὀβελίσκους ἔχοντα προῦχοντας κατ' εὐθεῖαν ἐκ θατέρου τῶν ἄκρων, μετρίοις ἀκοντίοις ἴσα σὺν τῷ σιδήρῳ.*"

[e] Polybius, vi. 23. "*Πρὸς δὲ τούτοις ὑσσοὶ δυὸ, καὶ περικεφαλαία χαλκῆ, καὶ προκνημίς. τῶν δ' ὑσσῶν εἰσὶν οἱ μὲν πάχεις, οἱ δὲ λεπτοί. τῶν δὲ στερεωτέρων οἱ μὲν στρογγύλοι παλαιστιαίαν ἔχουσι τὴν διαμέτρον οἱ δὲ τετράγωνοι, τὴν πλευράν. οἵ γε μὴν λεπτοὶ σιβυνίοις ἐοίκασι συμμέτροις, οὓς φοροῦσι μετὰ τῶν προειρημένων. ἁπάντων δὲ τούτων τοῦ ξύλου τὸ μῆκός ἐστιν ὡς τρεῖς πήχεις. προσήρμοσται δ' ἑκάστοις βέλος σιδηροῦν ἀγκιστρωτὸν, ἴσον ἔχον τὸ μῆκος τοῖς ξύλοις· οὗ τὴν ἔνδεσιν κατὰ τὴν χρείαν οὕτως ἀσφαλίζονται βεβαίως, ἕως μέσου τῶν ξύλων ἐνδέοντες, καὶ πυχναῖς ταῖς λαβίσι καταπερονῶντες, ὥστε μὴ πρότερον τὸν δεσμὸν ἐν ταῖς χρείαις ἀνακαλασθῆναι ἢ τὸν σίδηρον θραύεσθαι, καίπερ ὄντα τὸ πάχος ἐν τῷ πυθμένι καὶ τῇ πρὸς τὸ ξύλον συναφῇ τριῶν ἡμιδακτυλίων. ἐπὶ τοσοῦτον καὶ τοσαύτην πρόνοιαν ποιοῦνται τῆς ἐνδέσεως.*"

the Roman army—a very heavy, and a light one—the former of these we will now consider.

The heavy pilum then consisted of two parts. It had an iron head three cubits, or four feet and a half, in length, which terminated in a barbed quadrangular point, and a wooden shaft of the same length, round or quadrilateral. In either case this shaft had a diameter of a palm, or three inches. The greatest importance was attached at this period to a firm junction of the wooden shaft and iron spear. To effect this it is possible that the end of the iron stem was hammered down to a flat bar form, and inserted into a groove in the shaft. There has always been some difficulty about this junction, and Polybius does not make express mention of the bar form. But he does say that the iron was inserted in the shaft for half its length, or two feet and a quarter, making the pilum six feet and three quarters long. Great care was then taken to secure wood and iron together by numerous rivets or other fastenings, so that a fracture was more likely to occur in the iron stem itself, though a dactyl and a half (= one inch and an eighth) in thickness, at the point where it meets the wood—*τῇ προς τὸ ξύλον συναφῇ*—than in the actual junction. As I have said, there is some difficulty about this fastening, and other modes may be suggested; but those who contend for the usual socket form will find it troublesome to explain in accordance with our text. The bar form, as suggested above, is at least supported by examples found at Alise-Sainte-Reine.[a] These were secured by rivets with large flat round heads, which both give the dimensions of the shaft in such examples, and show it to have been quadrilateral.

These ponderous dimensions of the pilum have always been the point so hard to comprehend, and, in consequence, every possible attempt has been unsuccessfully made to explain away the passage. The testimony of so many historians of so many periods does not admit of the slightest doubt as to the intended employment of the pilum. It certainly seems a weighty missile—*οὐκ ἐοικότα ἀκοντίοις*, as Appian well says—but, though it may occasionally have been used as a spear, that is, as a thrusting weapon,[b] or for withstanding a cavalry charge, or any other such special purpose on an emergency, its primary and peculiar use was for hurling as a javelin.[c] Yet, it may well be asked, how could men even of a strength

[a] *Revue Archéologique*, loc. cit.

[b] Livy, lib. ix. c. 19. "Pilum haud paulo quam hasta vehementius *ictu missuque* telum." Cf. Plutarch in *Camill.*, 40, 41.

[c] Ennii *Ann.* viii. 46. "Hastati spargunt hastas; fit ferreus imber."

and stature never attributed to the Romans, have used such a javelin effectively? A round shaft with a diameter of three inches is strangely ponderous, but in the squared form it becomes still more difficult to understand.

It must be observed that modern writers differ considerably in their estimates of the probable weight of such a weapon. Some have placed it as low as ten pounds weight. Professor Köchly carries it up to fifteen at least, while M. de Reffye, who conducted the experiments on the pilum, under the direction of the Emperor of the French, supposes it to have been ten kilogrammes, or about twenty-two pounds.[a] We know not on what basis these respective calculations rest.

I am aware there is a difference of opinion as to the rendering of the words *πρὸς τὸ ξύλον*, in the text of Polybius. Without entering on this, I will assume him to mean the thickest part of the iron stem—that is, its base *against*, or where it leaves, the wooden shaft. Although then, at this point, it was no less than an inch and an eighth in diameter, yet it would rapidly taper away down to its small barbed head; and I question the weight of such a tapering iron to have been very great. We have then remaining the weight of the mere strig of two feet and a quarter inserted in the wood, and the four feet and a half of the shaft itself. This latter would of course much depend on the kind of wood used. The difficulty would be still further diminished if we could venture on the supposition that the shaft itself also tapered down somewhat to the iron stem at the one end, and to its probable iron, or bronze, shoe—*σαυρωτὴρ*—at the other, as the manner of certain lances is, leaving the full Polybian diameter of three inches solely at the balance point, where the hand would grasp and poise the weapon. Fortunately such monumental evidence as we possess bears us out in some degree in this supposition. Two grave-stones of Roman soldiers interred at Bonn on the Rhine still exist in the museum there; and there is another similar monument in the museum of Wiesbaden. These are rudely sculptured effigies,[b] but they afford valuable illustrations of the military equipments of Roman infantry. On all of these monuments the pilum-head is represented as issuing from the obtuse end of the stout shaft, which in two instances tapers downwards to the place of the *σαυρωτήρ*. On the third monument the shaft is incomplete. The *σαυρωτὴρ* is strongly represented on the Wiesbaden monument, and it must necessarily have always existed for the purpose of fixing the weapon in the ground on a halt.

[a] *Les Armes d'Alise*

[b] Lindenschmit, *Alterthümer*, vol. i. heft. viii taf. vi.

Polybius himself too names it as the termination of the cavalry lance,[a] and remarks on its value as a weapon when the lance-head had broken. Examples of its use will be found among the Roman reliques in the Kircherian and other museums of Italy; and others exist in the collection of Padre Garrucci, which he found at Præneste with Roman spears of the time of the Republic.

We must now turn to the lighter pilum of Polybius,[b] to which writers, engrossed by the first ænigma, have paid too little attention. It is certainly the more important of the two; for, in all probability, it is the conquering weapon, which, with certain modifications, the Roman legions continued to use down to a late period of the Empire, long after the heavy pilum had become obsolete. It is described as being constructed like the other, only in much lighter fashion. Polybius further tells us, in illustration, that it resembled the *σιβύνιον*, or hunting-spear, sufficient account of which exists in the writings of Hesychius to show that the *σιβύνη*, or *σιβύνιον*, was entirely an iron weapon, and therefore almost necessarily slender, like the pilum-head.[c] With this lighter and more tangible weapon, then, we shall solely have to deal.

It only remains to consider the difficulties attendant on the accounts of the heavy pilum, as handed down to us, and to see if any reasonable mode of relieving these difficulties may haply be suggested.

Professor Köchly indeed considers such an arm far too cumbrous and unwieldy ever to have been used in action. He therefore assumes it to have been solely employed as a *pilum murale* for the defence of fortified walls, or entrenchments. The main objection to this view is, that there is nothing whatever in the words of Polybius to sustain it; and that we do not hear of the *pilum murale* at all till the time of Cæsar.[d] It remains, moreover, to be seen whether the *pilum murale* did not correspond to the *pilum catapultarium* of Plautus.[e]

M. de Reffye, who claims much greater weight for the weapon, by no means seems to come to the conclusion that the weight would preclude its use. He tells us, as the result of the Emperor's experiments, it was found that a practised man

[a] Lib. vi. c. 25. "Ομοίως δὲ καὶ τὴν ἐκ μεταλήψεως τοῦ σαυρωτῆρος χρεῖαν, μονίμου καὶ βίαιον."

[b] Loc. cit.

[c] Hesych. i. "Σιβύνη, ὁλοσίδηρον ἀκόντιον ἢ λόγχη." Idem. ii. "Σιβύνη, ὅπλον δόρατι παραπλήσιον." Arrian. "Οἷς δὴ κοντοῖς, μακρά καὶ ἐπιλεπτὰ τὰ σιδήρια προῆπται."

[d] *De Bell. Gall.* v. 40; vii. 82.

[e] *Curcul.* v. 3, 689. "Ego ex te hodie faciam *pilum catapultarium*."

could hurl the lighter pilum, such as it existed in Cæsar's time, a distance of thirty metres, or about thirty-two yards; and that the weapon in its fall would pierce a plank of three centimetres, or about an inch and a fifth in thickness. The heavy one could only be hurled at close quarters. He contends against its use, but only on the grounds that a distance of thirty paces was absolutely required for the discharge of javelins between contending armies and the preparation for charging with the sword. He therefore assumes the discharge of pila to have been made at this distance of thirty paces.

It must be borne in mind, however, that in the memorable operations of Camillus the Roman soldiers received the attack of the Gaulish swordsmen on their pila, and then transfixed their shields *at close quarters* before they themselves drew their swords.[a] Again, we have positive accounts of the great power of the pilum to pierce through both shield and breast-plate at one blow, which could only have been done at close quarters.[b] No human arm could have propelled such a missile as even the lighter pilum with such terrible effect at a distance of thirty paces.

Polybius tells us that two pila were part of the Roman soldier's regular equipment, together with his brass helmet and greaves. He proceeds to describe the heavy pilum, and, with respect to the lighter one, he says, "*οἵ γέ μὴν λεπτοὶ . . . οὓς φοροῦσι μετὰ τῶν προειρημένων*,"—that is, "the light pila which they carry with the before-mentioned" heavy ones.

Now, it is a reasonable inference from all this, that, as there were two kinds of pila used in action, the Roman soldier carried one of each. The lighter one would be hurled at the distance best suited to the soldier's personal strength; the heavy one at close quarters, the more effectually to smash the heavy defensive armour of the foe—such as that of the Macedonian phalanx for instance—before engaging him with the sword. Such a reading seems probable enough, and has at least the merit of neither falsifying our author, nor tampering with his text. The dimensions he has assigned to the weapon doubtless cause great difficulty; but the mention Florus makes of the *ingens pilum* in the Macedonian war plainly shows that some such heavy javelin was still in use at this subsequent period.

[a] Plutarch in *Camill.* c. 40, 41.

[b] Suidas quotes: "*ἐξακοντίσας ὑσσὸν, διήλασεν αὐτοῦ τόν τε θυρεὸν καὶ τὸν θώρακα.*" Arrian, "*ἵππους τρώσοντες καὶ ἱππότην κατακανοῦντες, καὶ θυρεῷ καὶ καταφράκτῳ θώρακι ἐμπαγέντος τοῦ κόντου.*" *Vegetius*, de Re Mil. lib. i. c. 20.

It must be observed that Dionysius of Halicarnassus, in his mention of the pila, terms them χειροπληθῆ, or as much as the hand could grasp, without further enlarging on the subject. Now Polybius may only have intended to express this same idea of a very ponderous, palm-filling shaft, without meaning to bind us down to an actual palm diameter—παλαιστιαίαν. In any case there is no difficulty in comprehending that, without imputing any superior strength to the men of that period, continuous practice[a] from early youth in the use of any weapon would induce a proficiency far beyond anything we can now conceive. We know for instance that this was the case with the use of the sling of old; and, to come nearer home, we know that men of not so many generations past used bows in England, and shot distances far exceeding our modern efforts, simply by reason of early and continuous use.

Unless some such explanation be deemed satisfactory and admissible I fear we have no remedy but to suppose that the term παλαιστιαίαν must have had another meaning in the time of Polybius; or to admit, reluctantly, with M. de Reffye, that this word has been "sans doute falsifié par les copistes."

Before quitting this period of the earlier use of the weapon, it may be well to notice the singular fact of the rarity, or rather almost non-existence, of examples of pila of any epoch of Roman domination in the Italian peninsula. It might reasonably have been expected that some such would have been met with at Pompeii, preserved intact, for our information, together with so many other reminiscences of Roman life. Nothing of the sort, however, would seem to have been found there; or at least nothing has been preserved in the Naples museum. In fact I know only of two possible examples of the pilum in all the museums of Italy that I have been able to inspect. These, as the Padre Garrucci informs me, were met with at Capena, on the banks of the Tiber, in the country of the Sabine Falisci. One was presented to the museum of the Capitol at Rome by Signor Augusto Castellani; the other is in the possession of the Benedictines of S. Callisto and S. Paolo-fuor-le-Mura at Rome, on whose property it was found, together with a mass of other most remarkable reliques. These examples are in too fragmentary a condition to justify any positive classification, but they have slender round stems, with the socket end of common lance-heads. It is

[a] Ælius Spartianus in *Adriano Imperatore*: "Armisque et pilo se semper exercuit." Vopiscus in *Aureliano*: "Nullum unquam diem prætermisit, quamvis festum, quamvis vacantem, quo non se pilo et sagittis, ceterisque armorum exerceret officiis."

clear enough, however, these were either Roman pila, or the Sabine *veruta*, and from the concomitant pottery the latter attribution would seem more probable.[a]

Such examples must have daily occurred—must be of almost daily occurrence—but iron antiquities are at a sad discount in Italian museums through a complete ignorance, or disregard, of their value. Hence the peasant-finder casts them aside as worthless, since they bear no market value; and many an historical treasure becomes lost for ever.

We arrive now at the time of Cæsar, when the pilum was in its zenith. Fortunately we are in possession of evidence which enables us to verify it satisfactorily. The museums of Bonn and Wiesbaden, as has been said already, contain the sepulchral monuments of three Roman soldiers, which were found in the vicinity. These warriors are sculptured, with their arms, in full military dress. Each holds in his right hand the national weapon, which appears to answer, as nearly as possible, to the lighter pilum of Polybius, and serves as a type by which to test discovery.

On one of the Bonn monuments is the effigy of Q. Petilius Secundus, of Milan, a soldier of the 15th legion. In this case the pilum is some six feet in length. The other is a similar military monument, only the pilum is somewhat shorter,—a portion of the shaft perhaps having been broken off, for the two iron heads agree in length. As a proper balance is required for this arm, I presume the length of shaft would depend in some measure on the description of wood of which it was made. Oak, for instance, would be far weightier than ash, or fir, or larch; and an oaken shaft would therefore be shorter than one of the other woods.

The Wiesbaden monument—that of a soldier of the 8th legion—will shortly be published by Dr. Lindenschmit in the *Alterthümer*, which already contains those of Bonn.[b] In the same plate with these monuments is also given a Roman pilum found either in the *castrum* at Orlen, in Nassau, or one of the several other neighbouring Roman *castra*. This fine example of the weapon is preserved in the museum of Wiesbaden, where there are also several others with stems both round and square, discovered by the late eminent antiquary, Herr

[a] It may here be mentioned that, among other objects of this Capena find, preserved in the Convent museum of St. Paolo, is an iron dagger in an iron sheath, to which is attached a strong iron chain for suspension to the side. The dagger-hilt is broken, but the sheath measures 16 inches by 2 inches in breadth. It had been wrapt, with an engraved Etruscan mirror and other objects, in a linen cloth, the impression of which is very visible on the oxydised metals.

[b] Vol. i. heft viii. taf. 6.

Habel, in his researches in the Roman *castra* of Orlen, Irlich, Hofheim, and Heddernheim (*Castra Adriani*). It has manifestly been used in action. The barbs are compressed close down to the pyramidal point, as though it had been propelled through some hard substance, such as a wooden shield, for instance, and it is much bent.

The accompanying woodcut is taken from a cast[a] of another of these Wiesbaden *pila*, prepared in Dr. Lindenschmit's laboratory from the original, which measures 3ft. 6¼in. in length. The point, it will be observed, is in this instance of the pyramidal form of the weapons from Vulci before referred to. The stem terminates in a large square socket, which is not common. The outside measure of this socket is 1¼ in. square.



In addition to this evidence we can further adduce two more iron pila, in perfect preservation, found only a few years since in the bed of the Rhine at Mayence, together with a vast mass of other Roman reliques. These pila have been already illustrated in the *Alterthümer*.[b] The points are of the usual pyramidal form; the base of one being sharply truncated. The upper part of the stem is quadrilateral, the lower round. A solid quadrilateral iron cap, through which the stem passes, served to cover the top of the shaft, binding wood and iron firmly together after the insertion of the terminal strig. Such mode of junction was certainly used in one of these examples, for a portion of such strig, or tongue, still exists within the cap. These weapons are of far lighter construction than the Wiesbaden pilum, and most probably are of a much more recent date. They are in excellent preservation, and Dr. Lindenschmit's researches have shown the head and upper portion of the stem to be of steel, while the lower part is of soft iron—in perfect accordance with Appian's account. The concussion of the blow on the enemy's shield sufficed to bend these slender weapons, and render them for the time completely unserviceable. In the case of the Wiesbaden monument the iron cap is there represented of so large a size as must have added considerably to the weight of the weapon.

Even the most sceptical, it may be presumed, would be satisfied with this amount of evidence. Accordingly, when the successful researches at Alise-Sainte-Reine, prosecuted under the auspices of the Emperor

[a] Now deposited in the Ashmolean Museum at Oxford, together with the cast of the *gladius*, figured at the end of this paper.

[b] Id. heft xi. taf. v.

of the French, led to the discovery of a number of Roman arms, many of which precisely resemble those of Mayence and Wiesbaden, they were at once seen to be old Roman pila—"exesa scabra rubigine pila"—belonging to the legions under Cæsar, who fought the Gauls at Alesia.

M. Verchère de Reffye, the Emperor's "Officier d'Ordonnance," has given us a full account of all these arms,[a] of which, on the present occasion, the pila alone concern us. He describes them as slender stems, both round and square. Their length is about a metre, and the original weight, judging from their present decayed condition, might have been some 600 grammes, or about 20 ounces English, which would seem lighter than might have been supposed.

The points vary in form. Some of them have barbs—the ἀγχιστρωτὸν of Polybius. Others terminate in a cone,[b] or a small quadrilateral pyramid—ὀβελίσχους—like the pila found in the Rhine at Mayence. Here again it will be observed that these two latter forms differ from the dictum of Polybius; and some critics might have raised difficulties had not these pila been found in company with the barbed ones. The truncated cone, or pyramid head, would probably answer the purpose as well, since flesh, or other substances, when pierced, would close below the head, and render extraction difficult. Barbs are more liable to injury, becoming compressed on passing through any hard substance.

We further learn that there were three different ways of affixing the iron head to the shaft, viz. :—

1. The iron terminates in a socket, like ordinary spears; and in this the shaft is fixed, and secured by a rivet.

2. The iron terminates in a strig, six inches in length, traversed by a rivet. When these weapons were found the greater part had a ferrule above the rivet. These ferrules are both of a round and square form, with an inside diameter of $1\frac{1}{3}$ inch, which, as M. de Reffye considers, gives the diameter of the shaft. The head would seem to have been attached to the shaft by fixing one or more ferrules on to it, and then boring a place for the strig, which was finally secured by an iron rivet.

[a] *Revue Archéologique*, x. 337.

[b] These conical points are but the reproduction of a very archaic Oscan form of lance. Compare a bronze group, formerly in the Fejérvary collection, figured in the *Monumenti del Instit. Arch. Rom.* v. 50. The very large conical head of a Roman missile, but too short for a pilum, exists in the Mayence collection.

3. The end of the iron stem is flattened to the width of twenty-eight millimetres, or an inch and a sixth, for the purpose of inserting it in a cleft in the shaft prepared for its reception. This was secured by large, round, flat-headed rivets, which would show the shaft to have been quadrilateral, with a diameter of an inch and a sixth, this being the inside measurement of the rivets.

It has been objected that the uniformity of Roman discipline would not have sanctioned such variations in the chief military weapon. It is, however, impossible, after these many examples from Alesia, to suppose there was any one regulation pattern. Certain ranks, indeed, may have been armed with pila of one certain form, varying from those of other ranks. This is all we can say. It must also be borne in mind that the delicate form of the later pilum would require constant repairs and re-adjustment, which would soon create dissimilarity. Soldiers in an enemy's country must repair damages as best they may.

It is very clear, then, from these many examples of the pilum, that no rigid uniformity in its use was insisted on, either in the form of the head, or the mode of attaching the stem to the shaft. The stem itself occurs of square, round, and six-sided forms. We know of several modes of attaching it to the shaft, and still more may have existed. It seems futile, therefore, in any discussion on the subject, to lay down arbitrary rules on any such minor ever-varying details. The great point for consideration is, whether any imagined examples of the weapon correspond in their main and particular features with the accounts of Polybius and the other writers.

In fact the accounts left us by the very Roman writers themselves are most strangely dissonant, and contradictory. Polybius is decided enough in his narrative, however hard it may be to interpret reasonably, in accordance with our modern views. Cæsar also speaks clearly and repeatedly of that pilum of which, fortunately, we possess such good evidence. Plutarch, writing about the end of the first century, in his mention of the change in the weapon made by Camillus, terms it the ὕσσος, or pilum; which word Polyænus, a later writer, who had no other authority than Plutarch, chooses, in his "Strategemata,"[a] to change into ξυστὸς μακρὸς, or common long spear. Then comes Dionysius with his very difficult commentary,[b] which would almost lead us to infer he had mixed up the two pila

[a] *Polyæni Strategemata.* Berolini, 1756, lib. viii. Camillus. In the note on this passage the editor remarks, "Plutarchus, unde hic noster sua hausit, habet ὕσσοις.

[b] Lib. v. c. 46, *vide supra.*

of Polybius together.[a] We may well read his term, χειροπληθῆ, as applying to the larger pilum; yet he concludes by comparing the weapons to moderate-sized darts —μετρίοις ἀκοντίοις. Arrian, again, simply speaks of the pila as κοντοί, or darts; while Appian, who describes them closely, tells us they do not resemble darts at all—οὐκ ἐοικότα ἀκοντίοις.[b]

We now come to the latest historical account of this celebrated weapon, which, as it originated and increased with Roman greatness, so it declined in equal proportion with it. Nor is it the least curious circumstance in the history of the pilum, that when Vegetius wrote in the reign of Valentinian, at the close of the third century, its very name seems to have died out—"quod *pilum* vocabant, *spiculum* dicitur."[c]

Vegetius was an officer of high rank in the Roman army—he is styled *comes*—he was also a strict disciplinarian, and is consequently a very trustworthy authority. His words would show that the ancient pilum, half-iron, half-wood, as we have been used to see it, had become obsolete in the Roman army. Vegetius complains that the troops would no longer submit to their old severe discipline, or endure the weight of their arms.[d] Hence the pilum had now dwindled down to a weapon termed *spiculum*, with a short tri-lateral and barbed iron head, some nine inches or a foot in length, with a shaft of five feet and a half. Its full length therefore remained much the same. Yet even in this reduced state, Vegetius goes on to say, the pilum, or spiculum, was used by very few of the regular troops, impatient perhaps of the continued practice required.[e] It was chiefly employed by the barbarian mercenaries, under the name of *bebra*—and this is an important fact to bear in mind as we shall presently see. Still, however, it remained a formidable weapon; for, *when properly used*, it would penetrate both shield and breastplate, and once fixed in a shield, or other substance, it was difficult to remove. Such fatal effect was however only to be obtained by continued practice.[f] There was

[a] *Loc. cit.*

[b] Lib. iv. *De reb. Gall.* c. 1.

[c] Vegetius *De Re Mil.* ii. 23 de exercitatione militum.

[d] Id. i. 20. "Sed cum campestris exercitatio, interveniente negligentiâ desidiâque, cessaret, gravia videri arma cœperunt, quæ raro utique milites induebant."

[e] Vegetius, i. 20. "Instruendos igitur, ac protegendos omni arte pugnandi quocunque genere antiquorum armorum constat esse tirones."

[f] Vegetius. loc. cit. "Missilibus autem, quibus utebatur pedestris exercitus, pila vocabantur, ferro subtili trigono præfixa, unciarum novem, sive pedali, quæ in scuto fixa non possent abscindi, et loricam *scienter et fortiter directa* facile perrumpunt: cujus generis apud nos jam rara sunt tela." Idem, lib. ii. c. xv. "Item bina missilia, unum majus, ferro triangulo unciarum novem, hastili pedum quinque semis, quod *pilum*

also a lesser dart—the *verutum*—with a similar, but smaller, iron point of five inches, and a shaft three feet and a half in length.[a]

In this lesser weapon Professor Köchly sees the γρόσφος, or *hasta velitaris*, of Polybius. Examples of such missiles are rare, and some years since I fortunately obtained an example at Rheims, in France, which at the time was laid before the Society of Antiquaries, and is now engraved in our *Archæologia*.[b] It is tri-lateral, and tri-barbed; which at once explains why it could not be easily extracted from any object it had once pierced. This is the last historical mention we have of the pilum—so far at least as I am at present aware.

Before going further, it may not be amiss to remark that our subject can never be well understood if we attempt to limit it by the account of Polybius. He, indeed, truly depicted the pilum of his own day; but times and sudden exigencies call for changes in all things. Thus the weapon of Polybius, if we take his account literally, does not agree altogether with that of Dionysius of Halicarnassus.

Then follows a marked change in the weapon by Camillus, about A.U.C. 386, which it seems to have retained ever after. Nor must we overlook Appian's account of the pilum[c] on the occasion of the engagement with the Boian Gauls, under the Dictator Sulpicius, A. U. C. 396. He describes it as half iron, half wood, worked in quadrilateral form, and the iron as of *soft-tempered* quality, all but the point. He further remarks that the weapon is very unlike a javelin. This mention of the soft-tempered iron, at so early a date, would be remarkable as showing the discovery, at this early date, of rendering the foe defenceless by the destructive tactic of fixing the pilum in his shield, and bending it down. But Appian wrote about A.D. 140, and he is probably describing, like Dionysius, the pila of his own period, to which the use of soft iron for the pilum stem rather belonged.

We next have the double weapon of Polybius, and it is just possible that the heavier one may have been introduced at the period of the Carthaginian war, the

vocabant, nunc spiculum dicitur; ad cujus jactum exercebantur præcipere milites; quod *arte et virtute* directum, et scutatos pedites, et loricatos equites sæpe transverberabat."

[a] Idem. loc. cit. "Aliud minus, ferro triangulo unciarum quinque, hastili trium pedum semis, quod tunc vericulum, nunc verutum dicitur."

[b] *Archæologia*, xxxvi. 81.

[c] Appian, lib. iv. *De reb. Gall.* c. 1. "Τὰ δὲ δόρατα ἦν οὐκ ἐοικότα ἀκοντίοις, ἀλλ' ἃ Ρωμαῖοι κάλουσιν ὑσσούς, ξύλου τεραγώνου τὸ ἥμισυ, καὶ τὸ ἄλλο σιδήρου, τετραγώνου καὶ τοῦδε, καὶ μαλακοῦ, χωρίς γε τῆς αἰχμῆς."

more effectually to act on the superior armour and the elephants of the Africans. Polybius himself records an attack of Asdrubal on the Roman encampment in Sicily, when he was repulsed, and his elephants routed and captured, mainly by the use the Romans made of the heavy pilum, so at least I should read the words *ἐνεργοῖς τοῖς ὑσσοῖς*.[a] Florus, too, in his mention of the dismay of the Macedonian phalanx at the destruction produced "*ingentibus pilis*," seems to render certain testimony to the continued use of the weapon at this later period.[b] The term of *ingens* could not apply to the lesser pilum.

We now come to the pilum of Marius, and it is clear enough that a change had occurred yet again before his time. The extreme importance attached by Polybius to the junction of the shaft with the iron stem, by means of numerous rivets and other fastenings, had altogether vanished; and we find *two* rivets deemed sufficient for the purpose. Marius found the weapon in this phase; and he was thereby furnished with an opportunity of executing his well-known stratagem in the engagement with the Cimbri. This seems to have been regarded at the time as a remarkable innovation.[c] Some have supposed that it was for the purpose of preventing the enemy from returning the pila hurled at them, that Marius directed one of the two rivets, referred to, to be replaced by a wooden peg. When the pilum pierced the hostile shield the concussion of the blow on striking snapped this wooden peg asunder. The result was, that the iron and the shaft, being simply held together by a single rivet, collapsed like the blade of a clasp-knife. Thus the pilum became useless to the foe, but not to Marius, for the shaft, pendant from the rivet, and sweeping on the ground, not only embarrassed the foe, but furnished the Romans with a handle to pull down his shield. I believe this to have been the real purpose of Marius; and the principle of his

[a] Polyb. i. 40. "*Προσπεσόντων δὲ τῶν θηρίων, καὶ τιτρωσκομένων μὲν ὑπὸ τῶν ἐκ τοῦ τείχους τοξευόντων, συνακοντιζομένων δ' ἐνεργοῖς καὶ πυχνοῖς τοῖς ὑσσοῖς, καὶ τοῖς γρόσφοις*"—κ.τ.λ.

[b] *Flor. Epit.* ii. 7. "Cum tamen nihil terribilius Macedonibus fuit ipso vulnerum adspectu, quæ non spiculis, nec sagittis, nec ullo Græculo ferro, sed *ingentibus pilis*, nec minoribus adacta gladiis, ultra mortem patebant."

[c] Plutarch. Marius, c. 25. "*Λέγεται δὲ, εἰς ἐκείνην μάχην πρῶτον ὑπὸ Μαρίου καινοτομηθῆναι ὸ περὶ τοῦς ὑσσούς. τὸ γὰρ εἰς τὸν σίδηρον ἔμβλημα τοῦ ξύλου, πρότερον μὲν ἦν δυσὶ περόναις κατειλημένον σιδηραῖς. τότε δὲ ὁ Μάριος τὴν μέν ὥσπερ εἶχεν εἴασε, τὴν δ' ἑτέραν ἐξελὼν, ξύλινον ἧλον εὔθρανστον ἀντ' αὐτῆς ἐνέβαλε· τεχνάζων προσπεσόντα τὸν ὑσσὸν τῷ θυρεῷ τοῦ πολεμίου μὴ μένειν ὀρθὸν ἀλλὰ τοῦ ξυλίνου κλασθέντος ἧλου καμπὴν γίνεσθαι περὶ τὸν σίδηρον καὶ παρέλκεσθαι τὸ δόρυ διὰ τὴν στρεβλότητα τῆς αἰχμῆς ἐνεχόμενον.*"

When Plutarch wrote in the first century of our era the tradition of this stratagem of Marius must have been still fresh.

successful innovation, in the form of the soft-tempered iron stem, became adopted in Roman warfare shortly afterwards. This mode of attack is perfectly detailed by Agathias in his account of the *angon*, to which we shall presently have occasion to refer.

It will hence be seen that the use of the soft-tempered iron was another change subsequent to the times of Marius. Had he known of it, there would have been no occasion to remove one of the rivets for the purpose of bending down the pilum when fixed in the shield. It must be noticed that Plutarch's expression on this occasion would raise some doubts as to there having been yet another alteration at this period in the mode of joining the shaft and iron. His words are τὸ εἰς τὸν σίδηρον ἔμβλημα τοῦ ξύλου, the insertion, or graft, as it were, *of the wood into the iron*, not of *the iron into the wood*, as we assumed to have been the case with the Polybian pilum. The use of the common spear socket would at once meet this ἔμβλημα, were it not for the mention of the rivet-action, which renders the use of the socket impossible, and shows, at least, that this mode of attachment was *not* meant. The iron, indeed, must have extended in two longitudinal strips running up either side of the shaft, as is seen occasionally with lances and halberds; and some essayists have asserted this to have been the case I leave it to others to determine whether the words of Dionysius, προὔχοντας κατ' εὐθεῖαν ἐκ θατέρου τῶν ἄκρων, support this interpretation, or not. So far as the stratagem of Marius is concerned, it would be perfectly immaterial whether the fork was formed by the wooden shaft, or by the iron stem. So long as either played on a single rivet the result would be the same. All we can say is that we have not yet found any pilum heads of such construction, but this proves nothing. The main object in calling attention to the matter at all is to show how continuous the changes or modifications of the weapon must have been; and how useless it is to propose to limit them by any kind of dogma.

We now enter on barbarous times, when the Romans, driven from all their transalpine possessions, struggled to maintain even the imperial city itself against the conquering Teuton. Agathias, writing in the sixth century, rivals the preciseness of Polybius in his account of the Frankish weapon, the angon, to which he deservedly attaches much importance. It is described as a moderate-sized javelin with long barbs, and a shaft covered with iron plates to defend it from a sword-cut. We learn from him also the purpose of the Franks in using this weapon, and the way they used it.[a] There is not, however, one word

[a] Agathias, *Hist.* xi. 5.

further as to the make or length of the weapon which would justify the assumption that it resembled the actual pilum in any of its peculiarities except that it was barbed. It will, however, be seen from this account that the Frankish angon was a kind of cross between the legitimate old classical pilum and the later spiculum of Vegetius. It must have had the strong barbed head of the former with the short iron stem and long wooden shaft of the other. Had the angon had the long pilum stem the iron plates would not have been required to ensure it from sword-cuts. Possibly the Franks discovered that the double advantages of both spear and javelin were combined in the form of the more substantial angon. The slender, soft-tempered, long iron stem of the true pilum was manifestly but ill-fitted to receive a cavalry charge. No weapon, however, purely answering to what the pilum must have been according to Agathias—that is a barbed pilum head on a short stem some nine inches or a foot in length—has yet been met with. The thin iron plating of the shaft would hardly survive so long a period of corrosion.

But, instead of this, an arm, perfectly corresponding to the old Cæsarean pilum, has been found occasionally in graves; and because such graves were Teutonic, and the weapon barbed, it has been the fashion of late years to term them *angons*. Yet such examples are but rare, and we must consider the angon must have been in very general use indeed among the Franks, to justify the appellation of ἐπιχώρια δόρατα given by Agathias. Their merely occasional presence then in the numbers of Merovingian and Ripuarian graves yearly investigated in France and Germany would more reasonably prove them to have been emblems of military leadership, rather than ἐπιχώρια δόρατα, or the national weapon. Professor Köchly [a] is strongly disposed to see the real Cæsarean pilum in these rarely-occurring examples, and such an attribution is probably correct.

It may at first be considered difficult to show in what way the Franks, and other Teutons, obtained possession of a weapon so closely resembling the pilum of Cæsar, as this pseudo-angon; and the more so, when Vegetius gives us to understand the old pilum had become obsolete even in his time. Certain Roman legions, however, in the more remote provinces may have continued its use down to a very late period, and isolated examples must have survived for centuries. Moreover Vegetius himself has left us the important information, that the *barbarian troops* in the Roman army alone retained the use of the spiculum, or altered pilum, under

[a] Loc. cit. Compare also the Orlen pilum, now in the Wiesbaden museum, figured in Lindenschmit's *Alterthümer* (band i. heft 8, tav. 6), with the plate of angons in *Archæologia*, vol. xxxvi.

the name of *bebra*—a name we never meet with elsewhere. They were therefore accustomed to the use of the weapon, which they may have subsequently restored in the Teuton ranks to its Polybian character—for the so-called angon is invariably barbed. In any case the angon was most closely allied with the pilum, and used in precisely the same manner, and for the same purpose.

The whole history of the Roman pilum, during the almost completed millennium of its authenticated existence, from the *Horatia pila* of Ennius and Livy, to its final mention in the military records of Vegetius, is somewhat perplexing, as might well be expected. The merely incidental notices of it that occur in the works of many writers, at very long intervals, afford the only light we have to guide us in the attempt to track its many changes and vicissitudes. Yet, on the whole, its course is tolerably clear.

Nor can doubt exist as to the great object of its use. Marius employed his pila against the Cimbri; the Dictator Sulpicius against the Boian Gauls; Cæsar against the Transalpine Gauls; all for the same one purpose of bearing down the enemy's shield, and rendering him easily vulnerable. So long as shields remained in use, the great desideratum in warfare was to deprive the foe of this protection. Cæsar relates an instance even of his soldiers pulling down the shields of the Gauls with their hands.[a] Precisely similar, according to Agathias, were the tactics of the Franks. The Sicambrian warrior planted his angon deep in the foeman's shield, bore it down by sheer force, and then used his *francisca* with fatal effect.

This angon of the Franks, so long withdrawn from identification, like the Roman pilum, had almost passed into a myth, when, some years since, I discovered an example of it in the Musée de l'Artillerie at Paris, which I still believe to be the most reconcileable with the account of Agathias. It was found in a Frankish grave in the department of the Moselle, and is engraved in our *Archæologia*.[b] It was then bent at right angles, and one could well picture to one's self the fierce Frank wrenching it down, as it stood quivering in his adversary's shield, till it bent under his weight.

When I last saw the weapon at Paris, it had been unfortunately restored to its

[a] Cæsar, *De Bell. Gall.* i. 52. "Reperti sunt complures nostri milites, qui in phalangas insilirent, et scuta manibus revellerent, et desuper vulnerarent."

[b] *Archæologia*, xxv. plate v.

original form, and thereby totally deprived of the historic interest attached to it as a probably unique illustration of the use of the angon, as detailed by Agathias.[a]

Dr. Lindenschmit's kindness enables me further to exhibit a facsimile model of a Roman *gladius* (*see* woodcut) found at Bischofsheim, near Mayence, with a number of other Roman objects. It measures 25 inches in length, but a portion of the hilt is wanting. Its greatest width is an inch and three quarters. As will be observed, it is double-edged, and tapers away to a long, and extremely strong, almost quadrilateral point, which seems to have been the speciality of the weapon. If the temper of the blade was equal to the strength of the point, it would have been capable of piercing anything.



Examples of Roman *gladii* are very rare. Dr. Lindenschmit has engraved one in the *Alterthümer*, found in the Rhine near Bonn. It is about an inch and a half longer than this Mayence example, and has the word SABINA stamped on the handle.[b]

Another example has been quite recently found in Würtemberg. It is some two inches and a half longer and something broader than ours, which is precisely of the same size with the two gladii[c] found in the excavations of the Emperor of the French at Alise-Sainte-Reine. I know of no further examples of the weapon than these five.

[a] Examples of the pilum might reasonably have been expected in England, but I only know of one possible instance, figured in Roach Smith's *Collectanea Antiqua*, vol. vi. pl. 2, fig. 4. This was found in a Roman *castrum* on Hod Hill, near Blandford, Dorset, with other Roman reliques. It has a pyramidal cusp, and measures 22 inches, though broken.

[b] *Alterthümer*, vol. i. heft viii. taf. 6.

[c] *Revue Archéologique*, vol. x. Armes d'Alise.

XVI.—*An Inventory of the Effects of Henry Howard, K.G., Earl of Northampton, taken on his death in* 1614, *together with a transcript of his Will; prefaced by a Letter to Charles Spencer Perceval, Esq., LL.D., Director, from* Evelyn Philip Shirley, *Esq., F.S.A., Local Secretary for Warwickshire.*

Read June 4, 1869.

My dear Sir,

The Inventory which I have the honour to exhibit to the Society of Antiquaries, by the kindness of its owner the Baroness North, was taken on the death of Henry Howard Earl of Northampton, June 15th 1614, and may not be unworthy of the notice of the Society, whether we consider the historical importance which must ever attach to the character of "The Lord Privy Seal," as his Lordship is here officially called, disagreeably connected as his memory is with the murder of Sir Thomas Overbury; or the still existing "Northampton," or as it is now called Northumberland," House, built by this same Earl, "with Spanish gold," says Osborne, about the year 1605.

Of the enduring interest of ancient Inventories, in bringing before us the exact state of manners and times long gone by, there can be no doubt. It has been often pointed out by many antiquaries of note, and yet few such records, comparatively speaking, have as yet appeared in print. Mr. John Gough Nichols, in his Preface to the "Unton Inventories," ably edited by him for the Berkshire Ashmolean Society in 1841, has noticed the publication of several other ancient Inventories; and since that time a few more have been printed, the most remarkable being the volume privately printed by Mr. J. O. Halliwell in 1834, entitled "Ancient Inventories of Furniture, Pictures, Tapestry, Plate, &c. illustrative of the Domestic Manners of the English in the Sixteenth and Seventeenth Centuries." Of this collection, the most curious are the Inventories taken upon the death of the celebrated Robert Dudley Earl of Leicester at Kenilworth Castle in 1588, and that on the death of his widow, Lettice Knolles, widow of Walter Devereux Earl of Essex, and afterwards Countess of Leicester (at Drayton Basset), in 1634: none of them, however, will yield in importance to the Inventory which is now exhibited; and in the enumeration of plate and jewels it exceeds, if I am not mistaken, any that have been hitherto published.

The manuscript was discovered among the large collection of miscellaneous writings belonging to the Baroness North at Wroxton, in Oxfordshire. It is a

thin folio of twenty-five leaves, in somewhat dilapidated condition, and is evidently coeval with the period (1614), if it is not the original Inventory itself. To the transcript which I have made I have added a few notes in explanation of obscure words; and I here beg to express my thanks to George Scharf, Esq. F.S.A., Secretary and Keeper of the National Portrait Gallery, for his kind assistance in elucidating the identity of the portraits mentioned in the Inventory.

Believe me, my dear Sir,

Very faithfully yours,

EVELYN PH. SHIRLEY.

Lower Eatington Park, Stratford-on-Avon,
May 20, 1869.

AN INVENTORY OF THE LATE LO. PRIVY SEALE HIS JEWELS AND PLATE WITH THEIR SEVERALL WAIGHTES AND VALUATIONS TAKEN THE XVIth DAIE OF JUNE, 1614, TOGETHER WITH AN INVENTORY OF THE GOODES AND HOWSHOLDESTUFFE OF THE SAID LO. PRIVY SEALE AS WELL IN NORTHAMPTON HOWSE AS ATT GRENEWICHE.

Imprimis a standinge cupp of golde in a case of redd velvett waighinge 23 ounces penny w^t . . . . . lxix ^{li}

Item another standinge cuppe of golde in a case of redd velvett waighinge 30 ounces wantinge 2^d wtt. . . . . cx ^{li}

Item a cristall bowle of a rocke like unto a shell sett in golde waighinge 8 ounces 3 quarters penny waighte . . . . . xv ^{li}

Item three bowles of golde in a cabonett of redd velvett waighinge 21 ounces dim. di. qr. . . . . lxiiij^{li} x^s

Item a clocke of golde and christall sett withe rubies and diamondes waighinge 12 ounces one qu. 19 graines . . . . . xlv^{li}

Item a small hower glasse in a frame of gold[a] with fower small diamondes in the one end and one in the other, the sand and all waighinge five ounces wantinge sixe graines . . . . . xiii^{li}

Item a large gold ringe with a large rowghe saphire uncutt waighinge halfe an ounce and twentie graynes . . . . . xxx^s

Bequeathed by will to the Lo. Tres.[b] Item a longe Jewell with a large Rubie in the Toppe, two great square table Diamondes, and a pendant pearle, waighinge one ounce wantinge one penny waighte and 16 graines . . . . . ccc^{li}

[a] An hour-glass of this description, richly enamelled and set with jewels, is engraved in the second volume of Shaw's *Dresses and Decorations of the Middle Ages*. London, 1843.

[b] Thomas Howard Earl of Suffolk, Lord High Treasurer 1614-1618. See the words of this bequest and of the others noted in the margin, in the copy of the Earl of Northampton's will, *post*.

Item a great Jewell with sixe faire diamondes and other sixe lesse, waighinge two ounces penny waighte 8 graines . . . . . viiic^{li}

Item ten buttons of golde with Rubies waighing two ounces and a halfe wantinge 17 graines . . . . . x^{li}

Item an olde garnishe for a George and an olde ringe of golde without stones, and waighinge 9 ounces and a half 2^{d} waighte five graines . . . xii^{li}

Item a little crosse with 6 faire diamondes 2^{d} waighte and a halfe, stringe and all . xxviii^{li}

Item 16 sparkes of diamondes . . . . . vii^{li} iiij^{s}

Item one round great pearle . . . . . iiij^{li}

Item 15 little Rubies . . . . . vii^{s} vi^{d}

Item one Diamond . . . . . l^{s}

Item a Rubie . . . . . xxx^{s}

Item a picture of Queene Elizabeth sett in agatt with one Diamond fower Rubies waighinge one ounce . . . . . v^{li}

Item 4 buttons of golde sett withe one round pearle a piece and one without, waighinge 8 penny waighte dim. . . . . xx^{s}

Item a hoope Ringe of golde with a Rose of Diamondes fower penny waighte 16 graines . . . . . xx^{li}

Item one golde Ringe withe a Hiacinthe waighinge 3^{d} waighte 3 graines . . x^{s}

Item a crosse garnished with 8 Table Diamondes and two pointed and two pendant pearles waighinge half an ounce wantinge two graines . . . lx^{li}

Item a blewe Saphire in form of a halfe moone hanginge in a chayne of 7 Diamondes, whereof one is a faire one waighinge seaven penny waighte nyne graines . xvi^{li}

Item one golde Ringe with a large Table Emralde waighinge one quarter of an ounce two penny waighte . . . . . xviii^{li}

Item ten rocke Emraldes uucutt . . . . . x^{s}

Item a boxe withe 38 small Diamondes . . . . . xlv^{li}

Item a gold Ringe with a Table Diamond large, waighinge 3^{d} waights, with his stringe . . . . . xxx^{li}

Item a faire pendant paire pearle waighing penny waighte and 6 graines . . viii^{li}

Item a gold ringe sett with 15 Diamondes in a true lovers' knotte with the wordes *Nec astu nec ense*, waighinge three penny waights thirtene graines . . iiij^{li}

Item a Ringe with a large Table Diamond given by the *Counte Palatine*, waighinge 6 penny waights 10 graines . . . . . viic^{li}

Item a Tablett of Gold with a picture of my Lord of *Essex*, waighinge one ounce 3 qrtrs. 2^{d} waighte 3 graines . . . . . vi^{li}

Item ten buttons of gold sett with 4 pearles and one Table Rubie, a piece two ounces . . . . . vi^{li}

Item 16 gold buttons with eight ragged pearles, a piece 2 ounces 3^{d} waighte wantinge 3 graines . . . . . vi^{li}

Item a faire large blewe Saphire cut Diamondwise sett in a half moone of golde seaven penny waighte sixe graines . . . . . x^{li}

Item a rope of rounde great pearl orient of one hundred 25 carethes in toto . cccxxxiiij^li

Item five golde buttons with 4 pearles a piece, the other stones beinge taken out, waighinge one ounce wantinge 8 graines . . . . lv^s

Item five other golde buttons with fower pearles a piece, and in eache a sparke of Diamond, waighinge one ounce half penny waighte . . . vij^li

Item a chaine of golde enamelled, the lincks lozindgewise, 4 ounces 14^d waighte . xiiij^li

Item a seale of cristall of the rocke sett in golde and garnished with sparke rubies, 4 ounces 13^d waighte and a half . . . . . iiij^li

Item a Tablett in Golde with the picture of our Ladie, waighinge 2 ounces sixe penny waighte . . . . . vij^li

Item V sergeantes ringes waighinge one ounce three quarters 4 graines[a] . . iiij^li x^s

Item a hoope ringe with 9 sparkes, one painted [?], the rest wantinge, 2^d waighte . iiij^li

Garters.

Item a Garter, buckles, and pendantes of golde garnished with stones, twelve beinge diamondes and 16 rubies, waighing three ounces and a quarter . . xij^li

Item a *Garter* with buckles and pendantes wroughte with Antiques of golde and garnished with 5 small diamondes and eight small rubies, waighinge fowre ounces wantinge three penny waighte . . . . . x^li

Item a *Garter* garnished with gold onelie and enamelled, waighinge two ounces three q̃rters three penny waighte . . . . . vacat.

Georges. Ea. of Somersett.[b]

Item a large agatt *George* circuled with gold and sett with 57 small diamondes, waighinge two ounces . . . . . c^li

Bequeathed to the Prince.

Item an agatt George, havinge on the obverse the figure of *Christ* standinge upon the Dragon circled with golde and garnished with 67 small diamondes, waighinge one oz. 4^d w^t . . . . . cxx^li

Item a *George* cutt in blewe stone called Lapis Lazarus circuled with golde and enamelled onelie, waighinge one ounce 3 qu^rs 3^d waighte . . . vi^li

Item a rounde embossed *George* of gold and enamelled which usuallie hanged at the Collar of the order, and garnished with diamondes small and great, 27 ounces two dim. xxxv^li

Item a Collar of the order waighinge twenty eighte ounces five penny waighte . lxxxiiij^li

Item a pomander *George* with 3 pendant rubies . . . . vacat.

Item a watche *George*, beinge one of those two when the Inventorie was taken which the ll^ds [?Lords] subscribed, that then remained in M^r Will^m the goldesmithes hands waighinge 2oz: 2^d waighte . . . . . iiij^li

Not prized.

Item one other *George* sett with diamondes whereof parts were my Lo: and parte were M^r Williams the goldesmithes, and latelie broughte home . .

[a] The Rings given on their creation by serjeants-at-law to the Lord Privy Seal among other high officers of State were to be, according to Sir John Fortescue, of the value of six *scuta*, that is, as elsewhere appears, one pound sterling.

[b] Robert Carr, cr. in 1613 Earl of Somerset.

Plate.

	Ounces	Quar.	Di.	
Inprimis one paire of liverie[a] pottes damasked[b]	220	0	0	Guilte.
Item one paire of guilte stoopes	101	0	0	
Item two guilte Candlesticks	106	0	0	
Item foore fruite dishes partlie guilte	039	0	0	
Item one paire of flaggons snaile fashion	068	0	0	
Item three little trencher saltes	014	2	0	
Item fifteene spoones	030	1	0	
Item twelve trencher plates	108	0	0	
Item one pillar salte	048	1	0	
Item a double pillar salte and a trencher salte	051	2	0	
Item one bason and Ewer	140	0	di. q	
Item one other bason and Ewer	104	0	0	
Item one standinge Cupp and Cover	040	0	0	
Item one shippe bason and Ewer	082	2	0	
Item one paire of flaggon pottes	106	2	0	
Item one other paire of flaggon pottes	160	0	0	
Item one other paire of flaggon pottes	160	0	0	
Item one paire of candlestickes	117	2	0	
Item one *Norenburgh* Cupp and Cover	054	0	0	
Item one paire of candlestickes	113	2	0	
Item one paire of stoopes	117	3	0	
Item one paire of flaggon pottes	094	2	0	
Item one bason and Ewer	084	1	0	
Item a standinge cupp and cover	086	1	0	
Item another standinge cupp and cover	067	3	0	
Item another standinge cupp and cover	070	3	0	
Item another standinge cuppe and cover	062	0	0	
Item another standinge cupp and cover	064	0	0	
Item another standinge cupp and cover	048	0	0	
Item another standinge cuppe and cover	056	0	0	
Item another standinge cupp and cover	053	0	di.	
Item another standinge cupp and cover	046	0	0	
Item another standinge cupp and cover	039	3	0	
Item another standinge cupp and cover	033	3	0	

[a] Liverie, applied to articles made in a quantity, according to a fixed pattern, for distribution in the several apartments. Nichols in *Unton Inventories.*

[b] Damasked. The term is not usually applied to plate, though constantly to linen and silk; it is said first to have been applied to linens figured in imitation of the silks made at Damascus by the manufacturers of Flanders. See Nichols's *Glossarial Index to the Unton Inventories.*

		Ounces	Quar.	Di.
	Item another standinge cupp and cover	031	0	0
	Item another standinge cupp and cover	030	2	0
	Item a little *Noremburghe* cupp and cover	021	2	0
	Item another Noremburghe cupp and cover	053	0	0
	Item a paire of livery pottes	104	0	0
	Item another paire of livery pottes	084	2	0
	Item another paire of livery pottes	077	0	0
	Item Three Tankers	057	3	0
	Item a cuppe of Essaye	009	0	0
	Some totall of all the aforesaid guilte plate	3302	3	0
		at vi^s the ounce		
	This plate is overcast 39 *oz.* 3^{qrs}, *for the w^{ch} is to be abated* 11^{li} 18^s 6^d, *and then the som is but* 978^{li} 18^s			
	w^{ch} sold to M^r *Hooker* and M^r Havers goldesmiths, at vi^s the ounce, payable in November next by bond	990^{li}	16^s	6^d
Executor at v^s per oz.: 10^{li} 7^s 6^d.	Item one egge standinge cuppe and cover	041	2	0
Lo. Willm. Howard at 4^s per oz.: 7^{li} 12^s.	Item one Ivory cupp garnished with pearles and pretious stones	038	0	0
	Totall of bothe thes sommes is	xvii^{li}	xix^s	vi^d
	Some Totall of all the guilte plate is	1008^{li}	16^s	0^d
White.	Imprimis one fruit baskett	040	0	0
	Item a deep bason	086	0	di.
	Item a table baskett	157	0	0
	Item one posnett[a] and cover	038	0	di.
	Item one dozen of plates	085	0	0
	Item one fruite dishe	030	1	0
	Item halfe a dozen of plates	047	0	0
	Item one bason and ewer scallop fashion	093	1	0
	Item a table baskett	134	2	0
	Item a dozen of plates	112	0	0
	Item a chafinge dishe	058	3	0
	Item two dozen of spoones	041	0	di.
	Item a dozen of plates	112	0	0
	Item half a dozen of sawcers	024	0	0
	Item three little Trencher salts	014	3	0

[a] Posnett, a little cup for posset.

	Ounces	Quar.	Di.	
Item a deepe bason and a spoute pott	068	2	0	
Item a porrenger and cover	018	1	0	
Item 7 Candlestickes	173	0	0	
Item 5 spoones marked with W. A.	007	1	0	
Item a bowle	014	0	0	
Item a bason and ewer and a small candlesticke	053	0	0	
Item a smaile bason and ewer	076	0	0	
Item a posnett cup	071	0	0	
Item two livery pottes	080	0	0	
Item a chafinge dishe	029	0	0	
Item a stondishe with dust[a]	029	0	0	
Item a bowle and cover	020	0	0	
Item a bell	022	2	0	
Item a castinge bottle[b] and a little candlestick	008	1	0	
Item a Tanckerde pott	023	0	0	
Item a lampe	102	3	0	
Item a warming panne	071	0	di.	
Imprimis a charger	097	0	0	Silver vessell.
Item fower platters	214	0	0	
Item 6 dishes	166	0	di.	
Item 6 dinner dishes	135	0	0	
Item 4 half platters	147	0	di.	
Item 6 sallett dishes and one pie plate	134	2	0	
Totall of the white plate and silver vessell is	2820	1	0	
Which beinge solde to the Lord Tres[r] at v[s] the ounce, cometh to	705[li]	1[s]	6[d]	
Item a cupbord contayninge seeven parcels of *Purslane*[c] cuppes trimmed with silver and guilte, valued at			xii[li]	Ladie Lumley.
Item a standishe of silver with a cover, made scalloppwise, with a little inckhorne, sold unto M[r] *Binge* at v[s] the ounce, conteyninge	033	0	0	
Which amounteth unto			viii[li] v[s]	

Howshold-stuffe at London.

Imprimis fower pieces of buskedge verdure[d] with the armes in a losendge	xxviii[li]	xvi[s] Greate Chamber.
Item sixe greene stooles embrodered with velvett and greene twist upon clothe and a little backe chaire suteable to the same		iii[li]

[a] Probably an inkstand with fine sand to be used as we use blotting paper.

[b] Castinge bottle, a bottle used for casting or sprinkling perfume; introduced about the middle of the sixteenth century. Halliwell's *Dictionary*.

[c] Purslane, porcelain.

[d] Buskedge verdeure, green tapestry edged with busk, or linen cloth. Verdure is, according to Halliwell, used for tapestry generally.

Item a greene velvett chaire and a longe cushin, and fower greene velvett stooles . iiij[li] x[s]
Item a foote carpett crosse billetted[a] in coulors, contayninge 6 yardes . . l[s]
Item a cupboard and Turkie carpet . . . . . xv[s]
Item a great paire of brasse *Norenburgh* Andirons[b] . . . . iij[li] v[s]

Dininge Chamber.

Imprimis five pieces of buskedge hanginges of huntinge worke, conteyninge 132 elles et dim[r] at ij[s] viij[d] the sticke . . . . . xxiiij[li] iij[s]
Item a longe Turkie carpett of Englishe worke with the Earle of Northampton his armes, beinge 5 yeardes and 3 quarters longe . . . . xiij[li]
Item a high chaire, a lowe chaire, a short cushin, a longe cushin, two high stooles, and one lowe stoole of clothe of golde, the grounde maidenheare with frindge and tarsels of golde lined with damaske watchett[c] and maidenheare . . xiiij[li]
Item 6 highe stooles of russet velvett frindged . . . . iij[li]
Item a longe table of walnuttree . . . . . xlv[s]
Item a cupboord of walnuttree with a Turkie carpett, the grounde redd . . xl[s]
Item two small creepers[b] with brazen toppes . . . . ij[s] vi[d]
Item a foote carpett of Turky worke, the grounde redd and yelowe . . iij[li]

Withdrawinge Chamber.

Imprimis fowre pieces of busted[d] hanginges of the storie of *Sawle and David*, conteyninge 105 elles at iiij[s] ij[d] the sticke . . . . xxi[li] xvij[s] vi[d]
Item one highe Chaire with a longe cushin, two scrowle chaires, two highe stooles of braunched clothe of silver, the grounde blacke frindged and tassled with blacke silke and silver, all suteable . . . . . xi[li]
Item a large foote carpett of Turkie worke . . . . . v[li]
Item a wallnuttree cupboarde with a Turkie Cupboorde clothe . . . xxx[s]
Item 6 highe stooles of russett velvett frindged with silke of the same coulour . l[s]

Studie Chamber.

Imprimis three pieces of hanginges whereof two are of the former storie of *Sawle and David*, the third of men in Armes, conteyninge 80 elles at iiij[s] ij[d] the sticke . . . . . xvi[li] xiij[s] iiij[d]
Item a large chaire with too low stooles of stuffe Taffata striped black & yelowe tarseled with blacke silke and golde frindge . . . . xxx[s]
Item a *China* guilte cabonett upon a frame . . . . xxx[s]
Item a *Dansque*[e] cabonett inlaid with coloured wood the fore front three stories of colombes . . . . . v[li]

[a] Billetted, a term apparently derived from the billets of heraldry, and applied to a pattern formed of oblong pieces crossing each other.

[b] Andirons and creepers. The andirons, the ornamental irons or brasses on each side of the hearth; the creepers, the smaller low irons used for the support of the blocks of wood between the andirons.

[c] Watchett, a pale blue color. Halliwell.

[d] Busted, query fustian? See the Bury Wills (Camd. Soc.), note p. 250.

[e] Dansque, Danish.

Item two longe windowe curtanes of striped buffin,[a] red white and greene, lined wth greene saye[b]	xxiiij^{s}	
Item two Andirons topped with copper	iij^{s}	
Item three highe stooles and a carpett of Turky worke	xxx^{s}	
Item a table of wainescott onelie		Little Study.
Imprimis fowre pieces of hanginges of *Bruxels* worke garnished in the border with Cardinall *Wolsey* his armes conteyninge 88 elles at v^{s} the sticke	xxij^{li}	Bed Chamber.
Item a field bedstead of *China* worke blacke and silver branched with silver with the Armes of the Earle of Northampton upon the head peece, the toppe and valance of purple velvett striped downe with silver laces and knottes of silver, the frindge blewe silke and silver with 8 cuppes and plumes spangled suteable, the 5 curtanes of purple taffata with buttones and lace of silver, the counterpoint of purple damaske suteable laced, with two featherbeds and one fustian downe bed, a woolbed, a French quilte, one fustian blankett, and another blanckett, one bowlster, and two pillowes	xxx^{li}	
Item a highe chaire, a longe cushin, two highe stooles of russett velvett frindged but not lined suteable to the bed	iiij^{li}	
Item a lowe chaire, three highe stooles, and 2 lowe stooles of russett velvett frindged all suteable	xl^{s}	
Item two Turkie foote carpettes	xxx^{s}	
Itwo two small tables with two Turkie carpettes	xxv^{s}	
Item a lowe stoole of clothe of silver branched with redd and greene silke and covered	iii^{li} iiij^{d}	
Item two Cabonettes, whereof one is of ebony inlaied with white bone, the other of crimson velvett laid with silver and golde lace	vi^{li}	
Item a Desque with a Cabonett therein of crimson velvett laced.	xl^{s}	
Item three pictures, whereof one is of the Passion, another of the *Kinge*, and the third of the *Queene* his mother, all three with taffata curtens	xxx^{s}	
Item a skreene of tabine[c] frindged with silke frindge and lined with bayes	xx^{s}	
Item two buffin greene windowe curtens striped with yelowe	xxx^{s}	
Item a fire shovell, tonges, and crepers topped with brasse	vi^{s}	
Item a wallnuttree cupboord	xiii^{s}	
Imprimis a wainscott standinge Table	v^{s}	Pallet Chamber.

[a] Buffin, a kind of coarse cloth. [b] Saye, serge or woollen cloth.

[c] Tabine, a kind of silk. Halliwell. *Tabinet*, at the present day, is a stuff of silk and wool and mixed.

	Item fowre Turkie cushines	x^{s}
	Item a feather bed, a blanquett, and a grene rugge	iij^{li}
Little Gallery.	Imprimis seaven pieces of leather hanginges golde and azure ten foote deepe .	xviii^{li}
	Item a wainscott Table and an old Turkie carpett	xvi^{s}
	Item eight curtens of satten of *Bruges* redd and yelowe	vij^{li}
	Item 3 pictures at lengthe of the *Kinge*, the *Queene* mother, and the French kinge	xxvi^{li} x^{s}
	Item a picture of the *Earle* of *Lenox*[a]	
	A picture of the duchesse of Norff. the Lord Audleys heire[b] . . .	
	A picture of Edward Duke of Buckingham[c]	
	A picture of the Countis of Wiltes[d]	
	A picture of my Ladie Margarett,[e] the Duke of Norff. daughter . .	
	A picture of the countesse of Westmerland[f] daughter to the Earle of Surrey .	
	A picture of the Earle of Essex[g]	
	A picture of the Earle of Ormonde[h]	
	A picture of the Lord Viscount Bindon[i]	
	A picture of the Lord Admiral's[j] Father	
	A picture of the Lord of Walden[k]	

[a] Probably Matthew Stuart fourth Earl of Lennox, Regent of Scotland 1570.

[b] Margaret, eldest daughter of Thomas Lord Audley, born 1540. See her portrait, engraved in Lord Braybrooke's *History of Audley End*, from the original by Lucas de Heere, A.D. 1562, p. 30.

[c] Edward Stafford, Duke of Buckingham, K.G. beheaded 1521. In the supplement to Granger's *Biographical History of England* it is stated, that there is a portrait of the Duke at Woburn Abbey, but no such picture occurs in the printed catalogue (1834). This Duke of Buckingham is engraved by Houbraken, from a picture at Magdalene college, Cambridge, with the wrong name of Henry the father.

[d] Elizabeth, daughter of Thomas Howard second Duke of Norfolk, and wife of Thomas Butler Earl of Wiltshire.

[e] By Margaret daughter of Lord Audley, second wife of Thomas fourth Duke of Norfolk. She married Robert Sackville Earl of Dorset. There is a genuine half-length portrait of this lady at Knole.

[f] Jane Howard, married to Charles Neville, Earl of Westmerland, and sister of Henry Earl of Northampton, died 1593.

[g] Robert Devereux second Earl of Essex, or perhaps Robert the third Earl.

[h] Thomas Butler tenth Earl of Ormond, the friend of King Edward VI.

[i] Properly Viscount Howard of Bindon. There were three Viscounts, Thomas Howard, second son of Thomas third Duke of Norfolk, who died in 1582, and his two sons, Henry who died 1590, and Thomas who died in 1610.

[j] William Howard, fourth surviving son of Thomas second Duke of Norfolk, created Baron Howard of Effingham in 1554, ob. 1573.

[k] Thomas Howard, younger son of Thomas fourth Duke of Norfolk, created Earl of Suffolk in 1603, ob. 1626.

A picture of the Lady Berkley[a] . . . . . .
A picture of the Lady *Lomley*[b] . . . . . .
A picture of the Lord Admirall Seymour[c] . . . . .
A picture of the Ladie *Bullen*,[d] Queen Anne's Mother . . . .
A picture of the two children of the late Earle of Essex[e] . . . .
A picture of the ladie Bevill[f] . . . . . .
Eight pictures of the howse of Norfolk from John Duke of Norfolk to the Lord Matravers[g] now beinge. . . . . .
Item five waxe imported pictures of the five sences, being Italian worke under glasses . . . . . xx[s]

Longe Gallery.

Imprimis seaven large and deepe pieces of Tapestrie of the storie of *Christ*, without borders, contayninge 429 elles, at v[s] the sticke . . . . . cvii[li] v[s]
Item a large square China worke table and frame of blacke varnishe and golde[h] . v[li]
Item a paire of large Androns of *Noremburgh* worke . . . . iiij[li]
Item a paire of Molineux globes covered with greene taffata[i] . . . . iiij[li]
Item a wainscott table with a Turkie carpett . . . . . xxxv[s]
Item eight pictures of the Sibels . . . . . xl[s]
Item a picture of St. Francis with leaves, the one of the picture of our ladie, the other of *Christ* holdinge the crosse . . . . . xxvi[s]
Item the picture of Stephen Gardner . . . . . x[s]

[a] Catherine, second daughter of the celebrated Henry Earl of Surrey, and sister of Henry Earl of Northampton. She died in 1596, being the wife of Henry Lord Berkeley.

[b] Jane, eldest daughter and coheir of Henry Fitzalan, Earl of Arundel, and first wife of John Lord Lumley, who died in 1609.

[c] Thomas Lord Seymour, Lord High Admiral, beheaded in 1549. A portrait of him is at Longleat.

[d] The Countess of Wiltshire, Elizabeth daughter of Thomas Howard second Duke of Norfolk.

[e] Robert Devereux second Earl of Essex had three children, Robert, afterwards third Earl; Lady Frances, who married William Seymour, Duke of Somerset; and Lady Dorothy, the wife of Sir Henry Shirley, Bart.

[f] Frances, daughter of Sir Henry Knevitt, wife of Sir William Bevill of Cornwall. She afterwards married Roger fifth Earl of Rutland, whose daughter by her married George Villiers, Duke of Buckingham.

[g] Sir John Howard, "Jack of Norfolk," created Duke of Norfolk in 1483. The Lord Maltravers of 1614 was Henry Frederick, eldest surviving son of Thomas Howard, Earl of Arundel.

[h] Lacquered work.

[i] Hakluyt, in the preface to his *Principall Navigations* (1589), says, "I have contented myselfe with inserting one of the best generall mappes of the world onely, untill the comming out of a very large and most exact terrestriall globe, collected and reformed according to the newest, secretest, and latest discoveries, both Spanish, Portugall, and English, composed by M. Emmerie Mollineux of Lambeth, a rare gentleman in his profession, being therein for divers yeeres greatly supported by the purse and liberalitie of the worshipfull merchant, Mr. William Sanderson." For this reference I have to thank R. H. Major, Esq. F.S.A.

	Item the picture of Wickham B^p of Winchester [a]	x^s
	Item three pictures, one of the Scottish queene [b]	
	another of Anselme Archbishop of Canterbury	xv^s
	the third of Margarett Countesse of Salisbury [c]	
	Item a picture of Queene Marie, large but not full	xxx^s
	Item a large picture of St. *Francis*	xxx^s
	Item a picture of the three Maries at the Tombe	xv^s
	Item the picture of Christ and o^r ladie with an arched frame	xxv^s
	Item a picture of the Angell appearinge to the Shepheardes	xx^s
	Item a large nighte piece of the birthe of Christ	iiij^li
Great Withdrawing Chamb^r.	Item a large paire of *Noremburgh* Androns	iii^li x^s
Bigg^r Great Chamber.	Item a chimney piece of wainescott, not sett upp.	
Parlor.	Imprimis a large piece of Tapestrie hanginges of the storie of *Joseph*, conteyninge 84 elles, at iiij^s the sticke	xvi^li xvi^s
	Item a highe chaire and two lowe stooles of figured satten, blacke and russett, frindged with blacke	xx^s
	Item two small Turkie carpettes, whereof one is upon the ground	xxx^s
	Item one drawinge table of wainescotte	xv^s
	Item a table covered with leather, belonginge to a cowche in the wardrobe	x^s
	Item two deepe curtains of striped buffin lined with greene sage	xxx^s
	Item one fire shovell, one paire of tonges, one paire of crepers	v^s
Longe Wardrobe.	Imprimis eight pieces of course Tapistrie verdure hanginges lined with canvas, conteyninge 175 elles, at xx^d a sticke	xiiij^li xi^s viii^d
	Item one piece of busted verdure with armes in a lozenge, conteyninge 39 elles, at iiij^s the sticke	vii^li xvi^s
	Item one course piece of Tapestrie, beinge 12 elles, at xx^d the sticke	xx^s
	Item 7 pieces of riche Tapistrie, lined with Canvas, of *Bruxels* worke, sent to my Lord Privyseall from the Archduke, conteyninge 200 elles, at 35^s the sticke	ccc^li
	Item eight other pieces of riche Bruxels hanginges, given by the Archduke to my Lord of *Dorsett*, conteyninge 250 elles, at 35^s the sticke	iiij^c xxxvii^li x^s
	Item Three pieces of Tapistrie reasonable fine, quarter lined pale-wise, conteyninge 75 elles at 12^s a sticke	xlv^li

[a] William of Wykeham, Bishop of Winchester, ob. 1404.

[b] The King's mother; or, as we now call her, Mary Queen of Scots.

[c] Probably Margaret Plantagenet, Countess of Salisbury, beheaded in 1541-2.

Item fowre pieces of Tapistrie with figures unlined, conteyninge some moralitie, beinge 122 elles dim: at viii^{s} the sticke . . . . . xlix^{li}

Item fower pieces of Tapistrie of the storie of Joseph, lined, and suteable to the two pieces in the parlor, being 108 elles at iiij^{s} per sticke . . . xxi^{li} xii^{s}

Item one piece of *Bruxels* worke with the *Cardinal's* Armes, suteable to those in the bedchamber . . . . . vii^{li}

Item two pieces of buskedge with redd white and yelowe roses and bunches of grapes in the borders, conteyninge 55 elles at ij^{s} iiij^{d} the sticke . . . vi^{li} viii^{s} iiij^{d}

Item three other pieces of buskedge of differinge suites conteyninge 52 elles at ij^{s} iiij^{d} the stick . . . . . vi^{li} viii^{d}

Item 5 olde pieces of imagerie hanginges, whereof one is quarter lined, being of severall sortes, conteyninge 85 elles at ij^{s} per sticke . . . viii^{li} x^{s}

Item one other old piece of imagerie hangings of a larger sorte conteyninge 31 elles at iiij^{s} the sticke . . . . . iiij^{li} xiii^{s}

Item one small piece of busted hanginges of huntinge worke quarter lined, suitable to those in the dyninge chamber, contayninge 19 elles at iij^{s} vii^{d} the sticke . iii^{li} ix^{s} viii^{d}

Item fowre pieces of imagerie course stuffe, whereof three are lyned, conteyninge 96 elles at ij^{s} the sticke . . . . . ix^{li} xii^{s}

Item two large Persian Carpettes . . . . . xxxij^{li}

Item fowre shorte carpettes of verdure or fullage conteyninge 24 elles at ij^{s} vi^{d} the sticke . . . . . iij ^{li}

Item two small Turkie carpettes . . . . . xx^{s}

Item Ten pieces of old verdure lined havinge the Armes and scallop shell of the Lord Dacres, whereof fowre at Grenwich in the Courte Lodgenge, all conteyninge 136 elles at ij^{s} iiij^{d} the sticke . . . . . ix^{li} vi^{s} iiij^{d}

Item one great chaire of purple sattin imbrodered with clothe of gold and silver with a frindge suteable . . . . . x^{li}

Item one scrowle chaire, one highe stoole, one lowe stoole, and one footstoole suteable to the former purple sattin chaire . . . . .

Item one faire crimson velvett chaire richlie imbosted with copper and spread eagles, and blewe and white flowers, China worke, the frame painted with gold, and my Lord's crest upon the same . . . . . l^{s}

Item a blacke velvett chaire embosted with copper with a frame suteable . . l^{s}

Item a white satten chaire with a runninge worke of crimson satten embrodered betwene with slippes of seuerall coulors with a frame silvered and painted suteable . . . . . iii^{li} v^{s}

Item one little backe chaire of clothe of gold embrodered with golde twiste . xv^{s}

Item one old crimson bed whereof the toppe is taffata, 5 curtens, and the head of crimson velvett, the curtens beinge all laced with silver and gold lace and looped and buttoned with crimson and silver harte wise, the valance of crimson velvett laced suteable with a deepe frindge of crimson silke and silver . v^{li}

Item one newe crimson velvett longe cushen lined with crimson damaske and frindged and tarseled with crimson silke . . . . xxx[s]

Item one old field bed of blacke and crimson velvett imbrodred with white lions and the Staffordes knotte 5 curtens of Spanish satten belonginge to the bed . l[s]

Item one China cushen imbrodred with birdes, beastes, and flowers, the ground of white Grogeron[a] lined with yelowe taffata . . . . x[s]

Item one longe cushen of Tawney velvett imbrodered with wroughte slippes of severell coulors lined with chaungeable taffata and laced and frindged with orenge Tawney and silver . . . . . xl[s]

Item a longe cushion of Irish needle worke harte wise, lined with Tawney damaske and laced about with watchett and silver lace . . . . xv[s]

Item a cowche of crimson leather printed border wise with silver and golde, one longe and two short cushions suteable to the same, lined with hayre coulored velvett and laced about with gold lace . . . . xxxv[s]

Item two canvas wooll beds . . . . . xvi[s]

Item one sumpter clothe embrodred with my Lord's Armes . . . xxx[s]

Item one fustian downe bowlster belonginge to the fustian bed in the bedchamber . x[s]

Item two downe beds . . . . . viii[li]

Item three liverie beds and bowlsters . . . . . vii[li]

Item one large feather bed and bolster and one little olde bolster and one pillowe . . . . . iij[li] x[s]

Item two newe pillowes . . . . . vi[s]

Item three old wollen blancquits . . . . . viii[s]

Item two old Rugges, the one greene and the other purple . . . viii[s]

Item one newe large greene Rugge . . . . . xxv[s]

Item one mingled coulored rugg, sett on bothe sides with a greene edge about it . xx[s]

Item one fustian blanckett . . . . . viii[s]

Item a folded Arch picture of our ladie with *Christ* in her Armes . . xxx[s]

Item another arched foldinge picture with a golden fountaine in the middle and our Saviour issuinge blood there into . . . . . xx[s]

Item another large arched picture of the *Kinges* cominge to offer . . xxx[s]

Item another little arched picture of the same subject . . . vi[s]

Item another arched foldinge picture . . . . . xxvi[s]

Item a picture of the Lord Tres[r] *Burghley*[b] . . . . xxx[s]

Item one picture in lengthe of the Countesse of Hertford[c] . . . xxx[s]

[a] Grogeron,—Grogram, a coarse kind of silk taffety, usually stiffened with gum. Halliwell.

[b] William Cecil, the first and great Lord Burghley, ob. 1598.

[c] The Countess of Hertford. (Two pictures.) Probably Frances Howard, sister of Charles Earl of Nottingham, who died in 1578; or, Frances, daughter of Thomas Viscount Howard of Bindon,—the second and third wives of Edward Seymour, Earl of Hertford.

Item another in lengthe of the Lord Viscount Bindon [a] . . . . xxx^{s}
Item one longe picture of the salutacion of our ladie . . . . . iij^{li} x^{s}
Item another picture of the ladie Hertford [a] . . . . . x^{s}
Item another picture of the ladie Berkley [a] sister to my Lord . . . . x^{s}
Item an old picture of our Saviour taken from the Crosse . . . . xx^{s}
Item fowre pictures of the Sibels . . . . . xx^{s}
Item a picture of the King's mother [a] at large . . . . . xl^{s}
Item a mappe of Rome . . . . . x^{s}
Item another of *Amsterdam* and another of *Antwerpe* . . . v^{s}
Item a picture of the ladie of Westmerland [a] . . . . . v^{s}
Item a picture of *Grave Maurice* [b] . . . . . v^{s}
Item a picture of diverse praiers foldinge wise in coulors . . . v^{s}
Item a little round table upon a colombe painted watchett and silver . . xiii^{s} iiij^{d}
Item one small table of *China* worke in golde and coulours with flies and wormes upon a pillar suteable . . . . . xx^{s}
Item a little guilded cowche carved and cutt . . . . . xv^{s}
Item two large crimson buffin curtanes striped and purled [c] with greene . . xvi^{s}

Higher Library.

Imprimis one Tester with head and double valance frindged, and 7 curtens, whereof fowre are made upp, and 3 unmade, the stuffe of *China* taffata white embrodered with birdes and flowers. A counterpoint suteable lined with watchett Taffeta . . . . . xxxv^{li}
Item a field bed of purple velvett with tester and single vallence imbrodred highe with flowers piramides wise with gold twiste and spangles, five curtens suteable, with a purple satten quilte suteable imbrodered, two carpetts of purple velvett suteable, the one for a square table, the other for a Cupboorde, furniture for a large Chaire, two highe stooles, and two lowe stooles suteable unmade and golde toppes . . . . . ccxx^{li}
Item the flowers slippes and borders of an imbrodered Cloke with silver cutt forthe into pieces to imbroder some furniture for the howse withall . . iij^{li}
Item ten yardes of deepe gold frindge . . . . . viii^{li}
Item fortie two yeardes of blacke sattin lace imbrodered of the breadthe of two inches . . . . . x^{li} x^{s}
Item a blacke velvett foote clothe with frindge and 5 brode silver laces with headstall, raynes and the rest of the furniture suteable . . . . xxxiij^{li}
Item a watche and Alarum of copper and guilte in a case . . . iiij^{li}
Item a riche embrodered Cabinett in coulors . . . . x^{li}

[a] See notes in previous pages.
[b] Grave (i.e. *Graf*) Maurice. Probably Prince Maurice of Nassau, who died in 1625.
[c] Purled, bordered or trimmed. Halliwell.

Item an Ebony Cabinett inlaied with mother of pearle . . . xiij^{s}
Item one cabinett of purple velvett with a chesse boord and men suteable laced with gold lace . . . . . x^{li}
Item one little cabinett of needle worke in a velvett case . . . xx^{s}
Item a longe cushin of purple velvett richlie embrodred with embosted nedle worke of golde silke and some pearles unmade upp, with the Armes of my Lord of Northampton, given by my old ladie of Arundell[a] . . . v^{li}
Item another longe cushin of blacke sattin with slippes, flowers, wormes, and flies of needle worke unmade upp . . . . . xx^{s}
Item a long cushin of white sattin in coulours embrodred with divers p'sons in the middle . . . . . l^{s}
Item a new white Taffata wastecote embrodred with vine leaves and grapes in mosse worke with golde, silver, and silke . . . . . viij^{li}
Item a newe Taffata wastcote embrodred with the runninge worke of silver with birds and flies in coulours upon white . . . . . iij^{li}
Item another white Holland wastcote embrodred with a runninge work Cop'tm^{t}[b] of silke and golde with flowers of leaved silk in coulours . . . iij^{li}
Item two verie large sweet bagges embrodred with embosted worke of silver, gold, and coulored silkes, and filled upp with ovals of divers personages, lined both with clowded sattenes blacke the ground white . . . . xv^{li}
Item another white Taffata wastcote embrodered with running cop'tment of silver thread and spangles with flowers, flies, and wormes . . . iij^{li} x^{s}
Item a smaller sweet bagge embrodered with highe embosted mosseworke havinge two sea nymphes upon dolphins and other figures of fowles, edged about with lace of silver and gold, lined with carnation . . . . l^{s}
Item a white taffata sweet bagge with couloured flowers in ovals of gold, laced with carnacion . . . . . xx^{s}
Item one large clothe of silver sweet bagge embrodered with pinched plate of golde lined with russett Taffata . . . . . xx^{s}
Item one large white satten sweet bagge embrodered with knottes of silver Oes with burninge hartes . . . . . xxv^{s}
Item one large white satten sweet bagge embrodered with a runninge worke of roses and flowers in silke and golde, lined with a striped silver Grogeran . . xxx^{s}
Item a carnacion taffata sweet bagge embrodered with a twist of silver on both sides . . . . . x^{s}
Item a small white satten sweet bagge embrodered with flies wormes and flowers in silke and golde . . . . . xx^{s}

[a] Probably Anne, sister and coheir of George Lord Dacre of Gillesland, wife of Philip Howard, Earl of Arundel.

[b] Compartment ?

Item one lesser white satten bagge embrodered on bothe sides with golde twiste roses and marigoldes . . . . . xvi^{s}

Item one small white satten bagge embrodered with flowers and birdes lined with carnacion sattin . . . . . vi^{s} viii^{d}

Item one small sweet bagge of Tent work the ground silver with pottes and flowers lined with greene sattin . . . . . vi^{s} viii^{d}

Item one carnacion bagge withe starres on both sides . . . iiij^{s}

Item one large damaske bagge of crimson, laced with silver lace round stringes and buttones suteable . . . . . xxv^{s}

Item one crimson velvett nighte bagge . . . . . vi^{s} viii^{d}

Imprimis one bunch of a chaine lace in Esses of blacke silke and silver of 100 yardes xxv^{s} vi^{d} Lowe Ward-robe.

Item 15 ounces of silver lace . . . . . xxx^{s}

Item another of brode parchement[a] lace of russet silke and silver of 50 yeards . xx^{s}

Item a newe purple robe of *St. Georges* . . . . . x^{li}

Item another olde crimson robe without the kirtell . . . . viii^{li}

Item a purple mantell . . . . . iiij^{li}

Item a carnacion carpett imbrodred over with embosted worke of golde wth flowers suteable to the chaire in the wardrobe . . . . vi^{li}

Item a bagge of embrodered flowers . . . . . xl^{s}

Item sixe nighte cappes of silver silke & golde . . . . xl^{s}

Item 13 yeardes and a quarter of purple golde velvett *China* with flower de luces and diamond worke . . . . . viii^{li} xiii^{s} iiij^{d}

Item a canopie of rich clothe of Tissue upon purple silke with valance suteable to the same and a rich call fringe of silver and golde and orange Tawney silke frindge, a back to the canopie of silke clothe of tissue suteable to the tester of the bed & two curtanes of yealowe damaske laced and buttoned with silver and gold . xxvi^{li} xiii^{s} iiij^{d}

Item a bagge of 13 score and 15 yeardes of old russett silke and silver lace . iiii^{li} x^{s}

Item a bolte of unshorne velvett newe of 15 yeardes at 15^{s} the yearde . . xi^{li} v^{s}

Item 15 yeardes of blacke wroughte velvett at 14^{s} the yeard . . . xi^{li} v^{s}

Item a watchett gold tinsell grogeran bagge embrodered with leaves and flowers of gold in a runninge worke . . . . . xxv^{s}

Item a white satten bagge imbrodered with a wreath of gold and greene silke leaves with burninge heartes roses and other flowers bothe sides alike . . l^{s}

Item a large sweet bagge of white sattin imbrodered with birdes beastes and flowers in silke and golde lined with carnacion satten . . . . l^{s}

Item an orenge tawney nighte bagge imbrodered with silver piramides and flowers both sides alike . . . . . xxxiij^{s} iiij^{d}

Item a large carnacion sweet bagge imbrodered with pellicanes butterfles and flowers and lined with carnacion satten . . . . . lv^{s}

[a] As to Parchment Lace, see Mrs. Palliser's *History of Lace*, 1865, p. 68.

Item a Taffata sweet bagge with wreathes of pinched plate and butterflies lined with taffata of the same coulor . . . . . xv^s^

Item a square carpett of course carnacion frenche velvett with a pellicane of golde in the middest wrought on with cheine worke and lined with yelowe taffata . v^li^

Item a *China* striped quilte of beastes and Antiques the ground white callico frindged about with a strawe coulored frindge . . . . . v^li^

Item another *China* quilte stiched in chequer worke with yealowe silke the grownde white . . . . . iiij^li^

Item one scarlett cloke lined with crimson satten . . . . iiij^li^

Item a *China* quilte stayned and spotted in coulors . . . . iiij^li^

Item a longe cushin of white sattin imbodered with a compartement worke of slippes & golde . . . . . iiij^li^

Item a carpet and cupboord clothe of purple velvett with silver and silke frindge belonginge to the bed where my Lord died . . . . vi^li^

Item the skirt of a gowne of clothe of siluer in which my ladie of Hertford[a] was maried v^li^

Item a *China* carpett of severall coulors the grounde white and weaved in with Antiques of severall colors lined with watchett Taffata . . . iiij^li^

Item nyne yeardes a quarter and a half of blacke riche plushe . . . vi^li^ xv^s^

Item the lyninge of 2 large clokes of purple sattin tissued siluer and gold with 3 Remnants of a paire of breeches . . . . xx^li^

Item 2 old Curtenes of greene damaske spotted with spangle starres . . xx^s^

Item 2 taffata pinke coulored pillowes . . . . . xvi^s^

Item a square table of orientall stone inlaied . . . . iij^li^ x^s^

Item a picture of *Lewes* the thirtenthe at large: *Fr: Kinge* . . . xx^s^

Item two pictures at large, the one of the French Queen, the other of an Italian . xl^s^

Item one paire of great old Androues, one paire of new androues, two fire shovels and two paire of tonges . . . . . x^s^

Item an emptie cabinett large on 6 feete . . . . . xv^s^

Item two little Tables . . . . . vi^s^

Lower Library.

Item a great crimson velvett chaire and three crimson velvett stooles suteable to the old crimson velvett beds in the wardrobe . . . . xlv^s^

Item a purple bedstead belonginge to the rich purple velvett bed, the bedstead painted with golde . . . . . iiij^li^

Item a large frame for a chaire, two highe stooles, two lowe stooles, and a foote stoole suteable to the bedstead . . . . . l^s^

Item one Table suteable and a court cupboord . . . . iiij^li^

Item the frames of a highe chaire 2 highe stooles and two scrowle chaires of purple and golde painted in workes . . . . . lv^s^

Item another court cupboord of walnuttree inlaied . . . . xv^s^

Item a verie large bedstead with wreathed pillars ballasters for head side and feete, all coulored blacke and gold . . . . . vij^li^

[a] See *ante*.

Imprimis 300li quart. di. wth weight of pewter vessel. . . .	vi	Kitchen.
Item one great brasse panne, 2 lesser brasse pannes, 2 skilletts, a fryinge panne, 2 broches, two drippinge pannes, 2 spittes, 6 paires of rackes, a scummer, and an old brass potte	xvij^{s}	
Imprimis one halfe headed bedstead, one livery featherbed with bolster, a paire of blankettes, one rugge, and one small Table in *Mr. Ashburnham's* Chamber .	iij^{li}	Gentlemen's Chambers.
Item in *Mr. Gent's* chamber, one half headed liverie bedstead, a feather bed, a bolster, a paire of blankettes, one rugge, one small table, one stoole . .	iij^{li}	
Item in *Mr. Jud and Mr. Jermynes* chamber the like as in the rest, with one stoole and wantinge a bed stead	iij^{li}	
Item in *Mr. Cole* his chamber one bed stead, two fether beds, a bowlster, a paire of blankettes, one greene rugge, one table, and one stoole . . .	iij^{li} xv^{s}	
Item in *Mr. Lewes* his chamber a livery bed stead, a feather bed and bolster, a paire of blankettes, a rugge, two stooles, & a table	iij^{li}	
Item in *William Foxe* his chamber a livery bedstead, a featherbed, a bolster, a paire of blankettes and a rugge	iij^{li}	
Item in the *Footemens* chamber as in *William Foxe* his chamber . .	iij^{li}	
Item in *Mr. Griffith*[a] his chamber two featherbeds and two bolsters . .	iiij^{li}	
Item in *Mr. Savage* his chamber one livery bedstead, one featherbed, one bolster, a paier of blankettes, a rugge, one table, and one stoole of clothe . .	iij^{li}	
Item in *Mr. Heydon* his chamber one feather bed, one bolster, a paire of blankettes, a rugge, a Table, and a stoole	iij^{li}	
Item in *Mr. Hodder* his chamber a livery bedstead, one feather bed, a paire of blankettes, one rugg, a table, two stooles and one bolster . . .	iij^{li}	
Item in *Mr. Willowes* his chamber one bedstead, a feather bed, bolster, a paire of blankettes, a rugge, a Table, and one russett stoole . . .	iij^{li}	
Item in *Mr. Harrys* his chamber a livery bedstead, one featherbed, one bolster, a paire of blankettes, a rugge, and a Table	iij^{li}	
Item in the *Gardner's* chamber a bed, a bolster, a paire of blankettes and a rugge .	xl^{s}	
Item in *Sam: Fishe* his chamber one bed, one bolster, a blankett and one rugge .	xl^{s}	
Item in *Mr. Jaggards* chamber two beds, two bolsters, a blankett and one rugge .	iiij^{li}	
Imprimis one gowne of russet velvett lined with unshorne velvett of the same coulor buttoned and laced with two laces of russett silke & silver . .	xiiij^{li}	Wardrobe.
Item another gowne of blacke wroughte velvett in slippes and flowers, the sleeves laced		This solde by consent and Mr Griffits accomptable for.

[a] John Griffith was the Earl's secretary, and, together with William Byng and Robert Cole, an executor of his will. At the end of the epitaph on the Earl's monument, now in the chapel of Trinity Hospital, Greenwich, is the sentence, "Johanne Griffitho, huic comiti ab epistolis, curante positum." See Dugd. *Baronage* and Hasted, *Kent*, i. 31. All the gentlemen and others named here will be found as legatees in the schedule to the will, *post*.

overtwhart and round about with two open laces of blacke silke lined with blacke unshorne velvett . . . . . x^li

Item an olde blacke wroughte velvett gowne with one blacke silke lace lined with blacke unshorne velvett . . . . . vi^li

Item a plaine blacke velvett cloke lined with sabels, the backe parte muche worne . xxx^li

Item a blacke velvett cloke with a piramides worke of laced knottes and lined throwghe with blacke plushe . . . . . viij^li

Item a blacke Taffata cloke with fowre blacke satten laces imbrodered with roses and with blacke Tabine . . . . . viij^li

Item a blacke cloke of uncutt velvett raced[a] with workes and lined with blacke satten lace laid heringe bone wise and lined with blacke pincked sattin . . xvj^li

Item one blacke Taffata cloke, garded with 9 blacke Taffata weltes, laced and lined with plaine blacke velvett . . . . . viij^li

Item one blacke clothe cloke laced about with 15 small laces and lined with blacke unshorne velvett . . . . . vij^li

Item a russett cloke of uncutt velvett raced about with flowers lined with russett sattin raced . . . . . x^li

Item one blacke cloke of uncutt velvett raced about with workes and lined with blacke sattin raced in flowers and knottes . . . . x^li

Item a blacke velvett cloke laced billete[b] and lined with black taffata pincked . vij^li

Item a plaine blacke clothe cloke lined with blacke velvett . . . vij^li

Item an olde curle cloke laced with 2 bias laces and lined with a small billettie cutt of taffata . . . . . xl^s

Item an old blacke clothe cloke laced with 2 laces of twistinge knottes and lined with Tabine . . . . . iiij^li

Item a blacke silke curled cloke laid about with a frindged lace in worke and lined with blacke Tabine . . . . . xx^s

Item a short Duche blacke velvett cloke with sleeves laid almost all over with a blacke sattin lace in a worke lined with blacke pincked sattin . . xl^s

Item a Spanishe blacke velvett cloke imbrodred all over with bugles and lined with blacke sattin pincked and raced . . . . . iij^li

Item a blacke silke grogeron ierkin cutt and laced with satten lace billetwise lined with plain blacke taffata . . . . . xl^s

Doublettes. Item one white satten doublett laced all over with an open silver lace heringe bone wise the sattin cutt betwene . . . . . xl^s

Item a white satten doublett laced all over with a small golde lace billetwise and cutt betwene . . . . . l^s

Item one sute of white satten with purple silke and gold lace bias wise with a standinge cattes toothes cuttes betwene . . . . xiij^li

[a] Raced, pricked or marked. [b] See *ante*.

Item an old white satten doublett laced all over with a small silver lace in a worke raced and cutt betweene . . . . . xl[s]

Item a white sattin dublett unlaced cutt and raced with flowers and silver buttons and one silke grogeron dublett laced all over with a white sattin lace cutt and ravelled betweene . . . . . xx[s]

Item a sute of white sattin cut and raced all over . . . . iiij[li] x[s]

Item one paier of blacke clothe of silver hose branched with pains[a] imbrodered with silver upon blacke uncutt velvett . . . . xv[li] Breches.

Item a paire of rounde hose paned in a worke suteable to the third cloke . . iiij[li]

Item a paire of blacke satten hose the panes imbroderd suteable to the fowerth cloke iij[li]

Item a paire of newe blacke satten paned hose raced and cutt laced with sattin lace and imbrodered betwene . . . . . iij[li]

Item a paire of newe russett Taffata hose cutt and laced downe thicke with an open russett silke lace . . . . . xl[s]

Item a paire of newe russett sattin hose raced and cutt with sattin lace imbrodred betwene . . . . . iij[li]

Item a paire of russett Taffata hose with panes thicke laced and cutt with russet lace . . . . . xl[s]

Item a paire of russett sattin hose pincked and cutt, the panes laid with russett lace in Esses . . . . . xx[s]

Item a paire of russett sattin hose cut pincked and raced with panes of russet sattin billetted laced . . . . . xl[s]

Item a paire of blacke sattin hose cutt and raced with panes made of faire black satten lace . . . . . xl[s]

Item a girdle and a paire of hangers[b] of tawney satten imbrodred with seed pearle great and small, lined with tawney velvett . . . xxx[li]

Item a girdle and a paire of hangers of blacke sattin richelie embrodered with seede pearle and some faire ragged orient pearle, lined with blacke velvett . xxx[li]

Item a girdle and a paire of hangers of nedle worke of silver and golde and silke and full of strawberies, and powdred with pearle, lined with tawney velvett . xx[li]

Some totall of all the wearinge apparell.

Lynnen late in Mr. Jaggardes custody.

Imprimis 5 old square table clothes . . . . . viij[li] Table Clothes.

Item 3 large diaper table clothes at 12[s] a piece . . . . xxxvi[s]

Item 3 short diaper table clothes at 8[s] a piece . . . . xxiv[s]

Item one fine table clothe beinge 6 yeardes in lengthe . . . xx[s]

[a] Fringed or paned. Pane, a division, side, or piece.

[b] Hang or hanger; the loop or strap appended to the girdle in which the dagger or small sword hung.

Cupboord Clothes.	Item 3 square cupboard clothes of diaper	xxi^{s}
	Item three lesser of diaper	xviii^{s}
Towels of Diaper and other clothe.	Item 6 diaper towels of 4 yeardes in lengthe a piece at iij^{li} the towell	xviii^{s}
	Item two large towels of sixe yeardes in lengthe a piece valued at iiij^{s}	viii^{s}
	Item one small towell valued at	xviii^{d}
	Item two towels of holland at 20^{d} the piece	iii^{s} iiij^{d}
Lynnen.	Item 5 dozen and ten diaper napkins of the finer sorte, valued at viii^{s} the dozen	xlvi^{s} viii^{d}
	Item sixe dozen of course sorte valued at vi^{s} the dozen	xxxvi^{s}
Napkins.	Item foure dozen of the finest flaxen napkins at v^{s} the dozen	xx^{s}
	Item 9 dozen and five of courser at 3^{s} the dozen	xxviii^{s} iiij^{d}
	Item a dozen and a half of old ones	iiij^{s}
Sheetes and Blanquettes.	Item 8 paire of newe livery holland sheetes valued at xiii^{s} iiij^{d} the pare	v^{li} vi^{s} viiij^{d}
	Item 20 paire of old liverie sheetes at vi^{s} viii^{d} the paire	vi^{li} xiii^{s} iiij^{d}
	Item ten paire of course sheetes at v^{s} the paire	l^{s}
	Item 4 paire of newe holland sheetes of 2 breadthes and a half at 24^{s} the paire	iiij^{li} xvi^{s}
	Item one paire of two breadthes at	xv^{s}
	Item two paire of holland sheetes	xvi^{s}
	Item 28 paire of livery sheetes at v^{s} the paire	vij^{li}
	Item 3 fustian blankettes of 4 breadthes at 5^{s} the peece	xv^{s}
Bandes.	Item 16 ruffe Cambricke bandes at v^{s} the piece	iiij^{li}
Lynnen Shirtes.	Item a couple of verie fine holland shirtes with an open lace at 30^{s} a piece	iij^{li}
	Item 12 other plaine shirtes of holland at x^{s} a piece	vi^{li}
Pillow beeres.	Imprimis a paire of plaine holland pillowbeeres[a] at v^{s} a paire	x^{s}
	Item two paire of blacke wroughte pillowebeers	xl^{s}
	Item one paire wrought in coulors silke and golde	xiij^{s} iiij^{d}
	Item another paire of pillowbeeres in slippes of roses faire silke and gold	xxxv^{s}
	Item a paire never made upp wrought with beastes and flowers silke and golde	xl^{s}
	Item another paire imbrodered with water lilly leaves, kinges fishers and other birds and flowers silk and gold	xlvi^{s}
	Item another paire imbrodered with a runninge worke of pomgranets grapes and roses silke and golde	xl^{s}
	Item a paire imbrodered with roses and other flowers in coulors silke and golde and a gold lace	xl^{s}
	Item another paire with a traile worke of sundrie flowers, strawberyes and pinckes	xl^{s}

[a] Pillow beere, a pillow-case.

Item a cloth for a coveringe basquett . . . . . xvi^{s}
Item one white satten sweet bagge imbrodered with golde and silke in coulors . xxx^{s}

Some of the lynnen and other thinges in Mr. *Jaggarde* his custodie } lxxij^{li} xv^{s} ij^{d}

An Inventory of all my Lord Privy Seale his howshold stuffe at Grenewiche.

At the Lodge in the Parke.

Vpper storye.

Imprimis two pieces of leather hanginges azure and golde . . . vii^{li} Pallatte Chamber.

Item two pieces of the same hanginges . . . . . viii^{li} Bedchamber.
Item one half headed bedstead with a canopie of crimson damaske laced and frindged with golde 7 guilte cuppes with the traine or two curtens of crimson damaske with loopes of golde and crimson silke unlaced. A quilte of crimson taffata one fustian blankett and downe bed a bolster and feather bed and one quilte or wool bed . . . . . xxv^{li}
Item one large chaire with two stooles and one longe cushin laced with redd taffata of crimson damaske frindged with silke and golde with redd cotton covers and about the bed a spanishe carpett . . . . . viii^{li}
Item one little walnutt tree Table and carpett . . . . xiii^{s} iiij^{d}
Item one courte cupboord . . . . . viii^{s}
Item one curten of greene and striped buffin lined with greene saye . . xv^{s}

Item two pieces of Azure and gold leather hanginges and one curten of greene striped buffin lined with greene saye . . . . . v^{li} x^{s} Closett.

Item five pieces of quilte leather hanginges crimson and golde and a wallnuttree cupboord . . . . . x^{li} Gallery.

Middle story.

Item one curten of striped buffin lined with greene saye . . . . xii^{s} Utter Chamber.

Imprimis 3 pieces of gilte leather hanginges azure and gold and 3 old striped curtens unlined . . . . . viii^{li} x^{s} Great Chamber.
Item one foote Turky carpett two square cupboord carpettes of Turkie worke . v^{li}

Item one large chaire of crimson velvett with 6 stooles and a longe cushion with silke frindge suteable . . . . . vii[li]
Item one foldinge walnutte table and one court[a] cupboord . . . xx[s]

Withdrawing Chamber.

Imprimis two pieces of guilte leather hanginges vert and orre[b] one greene velvet chare and 2 stooles frindged with greene silke frindge with olde covers of greene . . . . . ix[li] x[s]
Item one small foote Turkie carpett, 2 old striped curtens, and one court cupboord . xl[s]
Item one crimson velvett carpett laced and frindged with silk and silver . . xx[s]

Wardrobe.

Imprimis two pieces of gilte leather hanginges silver and golde with 3 or 4 remnantes of gilte leather hanginges . . . . . v[li]
Item two paire of bellowes inlaid with mother of pearle . . . xxx[s]
Item one sunne diall for a garden faire cutt in stone with manie dials in it . x[s]
Item one presse and one lowe table of deale to be left in the howse . .

Lowest Roome.

Hall.

Imprimis one longe table and a forme of deale . . . . x[s]

Servantes Chambers.

Imprimis one livery bedstead, two feather beds and two bolsters, a paire of blankettes, and a rugge with one table of deale and one stoole Mr. Willm̃ *Foxe* his chamber v[li] x[s]
Item in Mr. *Gent's* chamber one livery bedstead, one feather bed and bowlster, a paire of blankettes and one white rugge, and a little table of deale . . iij[li] x[s]
Item in Mr. *Westcombe's* chamber one livery bedstead with fether bed and bolster, one pair of blankettes, one deale table and one stoole . . . iij[li] x[s]
Item one livery bedstead with feather bed and bolster, a paire of blankettes, a greene rugge and a table in Mr. *Hickes* his chamber . . . . iij[li] xv[s]

Courte Lodgeinge.

Gallery.

Imprimis five pieces of Tapestrie hanginges whereof one is cutt in two, of the storie of *Solomon*, and one traverse[c] of Tapestrie of *Bacchus his triumphe* . . xxix[li] xii[s]
Item five curtens of striped buffin unlined of crimson and greene . . xx[s]
Item one chaire one longe cushion two highe stooles of clothe of golde with russett and yelowe frindge . . . . . l[s]
Item one lowe stoole of clothe of silver in coulors the grounde white . . v[s]

[a] Court cupboard, a moveable sideboard used for the display of plate.

[b] Vert and or; from this and other heraldical terms in this Inventory, it would seem to have been compiled by a Herald.

[c] Traverse, a portable screen.

Item one walnuttree cupboord	x^{s}	
Imprimis 5 little pieces of Tapistrie hanginges	xiij^{li} xvi^{s}	Bed Chamber.
Item two windowe curtens of striped buffin lined with crimson bayes and one Spanishe, and a little olde Turkey carpett	xxij^{s} viii^{d}	
Item one field bedstead with tester and valance of cloth of gold striped with crimson, and a deepe crimson frindge, 5 crimson taffata curtens, one crimson taffata quilte lined with blewe callicoe, a downe bed and bowlster, two feather beds, and one pillowe	xviii^{li}	
Item one chaire a longe cushion and two lowe stooles suteable to the teaster of the bed and valance	xxxv^{s}	
Item one little foldinge Table and one courte cupboord . . .	xxx^{s}	
Imprimis one livery bedstead the head inlayed, one feather bed and bowlster, two paire of blankettes, a greene rugge and one Table and stoole, in Mr. *Griffithes* chamber	iij^{li} v^{s}	Gentlemen's Chambers.
Item in Mr. *Ashburnham* his chamber a livery bedstead, a feather bed and bowlster, a blankett, one redd rugge, and a little table	iij^{li} v^{s}	
Item in Mr. *Binges* chamber a liverie bedstead, a feather bed and bowlster, a paire of blanketts and a greene rugge	iij^{li} v^{s}	
Item in Mr. *Savage* his chamber a liverie bedstead, a feather bed and bolster, one blankett and a checquer rugge	iij^{li}	
Item a square Table	iij^{s}	Utter Chamber.
Item a feather bed and bowlster, and the rest of the furniture verie old . .	xx^{s}	Stable.

Lower Howse.

Imprimis 3 pieces of Bruxils hanginges of the storie of *David*, lined throughe, the border garnished with naked boys and Antiques . . .	xxix^{li}	Great Chamber.
Item 3 curtens of branched stuffe tawney and greene . . .	xxx^{s}	
Item one chaire, a longe cushin and two lowe stooles of branched clothe of silver, the ground blacke tasseled and frindged with blacke silke and silver, the frame painted with silver and blacke	ix^{li}	
Item 12 stooles of Turkie worke billetted red white and blue with cruell [a] frindge .	xlviii^{s}	
Item one small paire of brasse andirons and a courte cupboard of walnuttree .	xxx^{s}	
Item a picture of Marie Magdalen, a picture of an Italian curtezan, and a Mackarell,[b] one of a gentlewoman in white, and another of Duche Cookes maid and her kitchen.		Lo. Suff.
Item 3 pieces of Bruxels hanginges of the same storie and border as in the great chamber	xxv^{li} xiii^{s} iiij^{d}	

[a] Cruell, fine worsted.

[b] Fr. *Macquereau.*

Item 3 curtens of striped stuffe of greene blew white and bloome coulor . - xxv[s]
Item one chaire and two lowe stooles of striped clothe of silver frindged with yelowe and silver frindge . - . . . . xl[s]
Item one longe cushin of clothe of silver powdered and tufted with Frenche greene and golde, lined with chaungeable taffata, frindged and tasseled with blacke silke and silver . . . . . xx[s]
Item one scrowle chaire of clothe of silver branched with Tawney with silver and Tawney frindge . . . . . xvi[s]

La. Berkley. Item one picture of the ladie *Berkley*.

Bed Chamber. Item fower pieces of imagerie Bruxels hanginges quarter lined, the borders with birdes and emptie ovalles . . - . . . lxxij[li]

Sold to my lo. of Somersett. Item one blacke field bedstead painted with flowers and powdred with golde, with the Armes of my Lord of Northampton upon the head, 8 cuppes suteable. The tester and valence powdered with blewe starres and spangles and slippes of severall coulors and billeted, with 5 curtens suteable to the tester. A quilte of poppingey[a] greene sarcenett lined with blewe calicoe stitched with blacke silke . xl[li]
Item one downe bolster and three feather beds and a paire of fustian blankettes . ix[li]
Item a longe cushin two highe chaires one scrowle chaire a lowe chaire a foote stoole suteable to the bed savinge the frame, and two highe stooles all cased . xiiij[li]
Item one lowe stoole of watchett cloth of silver with watchett flower De luces . v[s]
Item a skreene of greene branched damaske 3 curtens of blewe and yelowe taffata striped blewe and yelowe . . . . . iiij[li] x[s]
Item a court cupboord of walnuttree, a square table of deale . . . xiiij[s]
Item a paire of Crepers fireshovell and tonges suteable . . . xx[s]
Item a chamber watche with an Alarum . . . . .

Gallery. Imprimis 5 curtens suteable to those in the cross chamber, sixe crimson velvet stooles with cases suteable . . . . . vi[li]

S[r] Ro. Cotton. Item a picture at large of Prince Henry on horseback in armes[b] . . iiij[li]

M[r] H. Howarde. Item 14 Venetian pictures of one bignes . . . . .
Item Colman's[c] Arbour Royall or Genealogie of the Kinge and Queene, and Speede's large mapp of *England Scotland* and *Ireland* . . . . xii[s]

[a] Poppingey, popinjay, a parrot.

[b] A picture at large of Prince Henry on horseback in arms. This picture is not at present known to exist.

[c] Coleman's *Arbour Royal, or Genealogie of the King and Queene.* This work is described by Moule, in his Bibliotheca Heraldica, p. 65. It was comprised in 10 sheets, and contained "all the arms of the Matches" cut in wood; and in the border "The Arms and Matches of all the Nobility of England." It was published in large quarto in 1608 by Morgan Colman.

Imprimis fower pieces of Bruxels hanginges unlined, whereof one is suteable to those in the great chamber, the other three of imagerie sutable to the former in fineness of stuffe	xl^{li}	Winter Dyning Chamber.
Item one curten of striped taffata of purple ashe coulor and yelowe &^{c} . .	xx^{s}	
Item one highe chaire, two highe stooles, two lowe stooles of wroughte purple velvet sutable	iij^{li}	
Item one lowe stoole of blacke velvett imbrodered with a rowe of slippes of silver .	x^{s}	
Item one longe cushin of purple cloth of silver lined with purple taffitie frindged and tasseled with russett silke and silver	xv^{s}	
Item eight highe stooles of tawney velvett with cases . . .	liij^{s} iiij^{d}	
Item a court cupboord of walnuttree and a square table of walnuttree . .	xvi^{s}	
Item a paire of tables of Ebony inlaied with Ivorie and men suteable . .	v^{s}	M^{r} Cole
Item a nighte piece of the whippinge of Christe	xx^{s}	M^{r} Griff
Item a large fire shovell and tonges suteable, with 2 creepers, twelve small square Turky carpettes ^{10li}, two longe foote carpette ^{7li}, and one square Persian carpett ^{9li}	vi^{li} xxx^{li}	
Imprimis three pieces of Tapistrie imagerie hanginges lined and two unlined, the stuff indifferent	xxij^{li} vi^{s} viii^{d}	Bed Chamber.
Item a crimson velvett bed thicke imbrodered with gold twiste in flowers and spangles, double valanced with silke and cowled with golde, the bed head sutable, and the inside of the valance, five damaske crimson curtens laced and buttoned with golde, a bed stead of white varnish and golde with white coptement, three feather beds, one bowlster, one crimson taffata quilte lined with crimson callicoe, with cappes and feathers sutable, one highe chaire of crimson velvett with 2 highe stooles, the frames of gold and redd, laced as the curtens with cases .	lv^{li}	
Item a longe cushin laced with damaske and one curten of striped coulored taffata .	iij^{li}	
Item two carpettes of crimson velvett frindged sutable to the valance . .	xiij^{li}	
Item a fire shovell tonges and crepers	iij^{s}	
Item a table of walnuttree and a corte cupboord of wainscott . . .	xiij^{s} iiij^{d}	
Item two pieces of hanginges suteable to those in the bed chamber . .	xl^{li} viii^{s}	Study.
Item a curten suteable to that within.		
Item a walnuttree table and two highe stooles of old clothe of silver . .	xxvi^{s} viii^{d}	
Item one large Persian Carpett	xvij^{li}	Wardrobe.
Item a greene carpett of verdure Tapestrie	xiii^{s}	
Item a longe cushin of needleworke with slippes of roses . . .	xxvi^{s} viii^{d}	
Item 3 curtens of striped stuffe in coulors	xx^{s}	
Item a foldinge Indian screne	iii^{s} iiij^{d}	
Item two livery feather beds ten bowlsters and an old downe pillowe . .	x^{li}	
Item a double picture with the 3 kinges on one side	v^{s}	

Hall. Item one square table and fower formes of wainscott . . . . xx^{s}

Parlor. Item a border of gilte leather beinge Spanish hanginges, a wainscott draweinge Table and cupboord, and fower highe stooles of Turkie worke . . . . xl^{s}

Kitchen. Imprimis two broches, a paire of rackes, a drippinge panne, a spice mortar, two skillettes, a brasse panne, and a kettle . . . . . xv^{s}

Gentlemen's Chamber. Imprimis in Mr. Jaggardes chamber, one livery bedstead, a feather bed and bolster, 2 blanketts an old taffata quilte and a square Table . . . iij^{li}

Item in Capten Harris his Chamber a livery bedstead, bed and bolster, a blankett and one greene rugge . . . . . l^{s}

Item in M^{r} Heydon his chamber one livery bedstead, bed and bolster, two blankettes, one greene rugge and a livery Table . . . . . iij^{li}

Item in M^{r} Jeremyes chamber a livery bedstead, bed and bolster, two blankettes, a rugge and a Table . . . . . iij^{li}

Item in M^{r} *Willowes* his chamber, a feather bed and bolster, a blankett, a rugge, and two old russett clothe stooles . . . . . l^{s}

Item in the Cookes chamber a livery bedstead bed and bolster, a blanckett and a Rugge . . . . . iij^{li}

Item in M^{r} *Windhams* chamber a livery bedstead, one feather bed, one bolster, two blankettes, one greene rugge, and one livery Table . . . iij^{li}

ADDENDUM.—It is believed that the Will of Henry Earl of Northampton, the possessor of the great store of jewels and household goods included in this Inventory, has never been printed. As it appears to be a document of some interest, independently of that which it has in connection with the Inventory, it has been thought desirable to print it here, by way of appendix to Mr. Shirley's Communication.—C. S. P.

Will of Henry Earl of Northampton.

IN THE NAME of the holy indivisible and glorious Trinitie three Persons and one God. Amen. The fourteenth daye of June in the yere of oure Lord God one thowsand sixe hundred and fourteene, and in the twelveth yere of the raigne of oure most gracious Soveraigne Lorde James, by the grace of God of England Scotland Fraunce and Irelande Kynge, Defender of the faithe, of England France and Ireland the twelveth, and of Scotland the seaven and fortithe, I, Henry Earl of Northampton, Baron of Warnehill, Lord Privie Seale, Lord Warden of the Cinque Portes, Knighte of the moste noble Order of the Garter, Chancellor of the Universitie of Cambridge, and one of the Kinges Majesties most honorable Privie Councell, beyng weake in bodye, but stronge in mynde and of good memorye, do make and ordayne my last will and testament as foloweth: First, I do acknowledge that noe Synner hath ben more bounde then my selfe to Almightie God for his gracious providence in delivering me many and sondrye tymes from the most subtile and entrapping combinacions and practises of myne enemyes, but *quid retribuam?* only my soule in steadfast faithe into his blessed handes that gave yt, trusting to be saved only by the merittes of the bitter passion of oure sweete Savyoure, and protesting that I dye a true constant Servaunte of his, and a member of the Catholicke and Apostolike churche, saying with Saint Jerome, *In qua fide puer natus fui in eadem senex morior.* My bodye I appoynte to be buryed in the auncient Chappell within the Castle of Dover, and a Tombe there to be made for me at the chardge and discretion of myne executors.[a] I recognize with all loyalnes of my harte the exceeding and extraordinarye love, favoure, and bountye of my most deere and gracious Soveraigne, whome I have founde ever so constant to me his unworthie servaunte as noe devises of myne enemyes coulde euer drawe or divide his goodnes from me. I have nothing to present worthie his Majestie but the straynes and prayers from a loyal harte that his dayes may be longe and happie and his seede endure to the worldes end. I most humblie beseeche his excellent Majestie to accept, as a poore remembraunce of me his faithfull servaunt, a Cup of gould of one hundred poundes valewe with one hundred *Jacobine* peeces of Twentie-twoe shillings a peece therein, on which Cupp my desire is there should be this inscription: *Detur dignissimo.* To the most noble and hopeful Prince Charles I give my best George.[b] To my most deere and entirelie beloved neiphue the Earle of Suffolk I give my Jewel of the three stones,[c] one of them beyng that Rubye which his excellent Majestie sent me out of Scotland as his first token, which Jewell I cannot better repose with any then with hym that is soe faithfull and trustie to his Maiestie as my saied neiphue ys. And I give hym allso a Crosse of dyemondes geven me by my Ladye my

[a] He was accordingly so buried; but in 1696, the old chapel becoming ruinous, the Mercers' Company piously removed the Earl's body and the monument which had been placed over it to the chapel of the Hospital of the Holy Trinity at Greenwich, of which he was founder.

[b] See Inventory among "Georges."

[c] See Inventory among "Jewels," where the marginal note occurs, "Bequeathed by will to the Lord Treasurer."

Mother. And I hartelye entreate my sayed Neiphue to give his Countenaunce and furtherance to myne executors in performance and execution of my will. Item I give to my very good Lorde the Earle of Somersett my second George.[a] To my Neiphue the Lord William,[b] the somme of twoe thowsand poundes to be payed in convenyent tyme after my debtes by myne executors, which twoe thowsand poundes is with the leaste I confesse seyng I hould there is some equitye I should remember hym in respect of Clunn intended by his father unto hym and nowe come to my handes. Item I give the Suite of newe dressed hanginges which were my Lord Barkeleys to the nowe Lord Barckley[c] my ward. Item I give to John Southerwoode an Annuitye or Rente Chardge of twentie poundes with Clause and power of distresse for the same out of the Leased landes which I boughte at Greenewiche of the executors of the late Earle of Salisburye; To hould to the saied Sowtherwood for terme of his life: And fortie poundes yerelie out of the same during the life of James Symondes I give to the sayed James Symondes with power allso to distrayne in the sayed Landes for the same as yt shalbe behinde and unpayed. Item I require myne executors with the overplus of Sedgeley more then myne owne fyve hundred poundes to paye debtes of S[r] Robert Dudleys, as first Five hundred poundes to M[rs] Fitche and the rest as myne executors shall thinke meete and finde cause. Item I give to the poore of the parishe of S[ct] Martyns in the feildes in the Countye of Middlesex twentie poundes. I do desire myne honorable and my loving freindes to pardon me that I doe not by particular Legaceys shewe my last love and affection to them as I would desire, for that my debtes are greate and my servaunts many to be remembred and the chardge of my Hospitalls hathe spent me muche. And whereas I have made provision by a Lease to myne executors for tenne yeres after my decease and by a graunte of all my Jewells, goodes, and other thinges in that Lease expressed to them also made for payment of my Debtes and Legaceys and other thinges expressed in the same Lease, I will that myne executors shall yerelie uppon the next daye after Saint Andrewes daye at Northampton Howse exhibit and declare a true Accompte unto the Overseers of my Will of theire Receiptes and paymentes, and shalbe advised and directed by my saied Overseers in the affayres of my Will. And I chardge them especiallie to have a care that they procure the Hospitalls at Rysing and Greenewich which I have begunne to be founded and incorporated. And those twoe and the Hospitall at Clunn to be finished and endowed, that is to saye, the Hospitall of Clunn to be endowed with the free Rentes of the Rectoryes of Clunn and Bishopps Castle, beyng Fee-farm Rentes, and with the Rectories of Knighton and Church Stoke, which I will shalbe conveyed to that Hospitall by myne heire. The Hospitall at Greenewich, after yt is founded and incorporated, I will to be endowed by myne heire with the Ferme of Lowells and other thinges in Kent by me purchased in the name of S[r] Edward Barret and M[r] Fraunces More, and allso with the landes in Leigh Banckers and Shrofeilde purchased by me from his Majestie, and with the Messuages and gardens in Saint Martyns parishe

[a] See Inventory among "Georges."

[b] Lord William Howard was second son of Thomas fourth Duke of Norfolk, brother of the testator, by Mary daughter and eventual heir of Henry FitzAlan, Earl of Arundel.

[c] George Lord Berkeley, great nephew of the testator, being son of Thomas Berkeley who died in the lifetime of his father, Henry Lord Berkeley, who married the Lady Catherine Howard, Lord Northampton's sister.

in the feildes which I latelie purchased of S^r^ Robert Brett, Michaell Appesley, and Sir Edward Mountague, or any of them. And the saied Hospitall at Rising I will to be endowed by myne heire with a sufficient Rent-chardge of one hundred poundes by the yere to be yssuing out of all my Landes in the Countie of Norffolk. And I will myne heires for ever shall have the nominacion, placing, and displacing of the poore of the Hospitall of Rising, And the Companye of Mercers in London of the poore of the Hospitall at Greenewich, yet soe as they choose twelve out of Greenewich and the other eighte out of Shottisham in Norfolk, where I was borne. The overplus at the end of tenne yeres, yf any shall remayne in myne executors handes, I will by the direction of myne overseers to be ymployed in charitable uses with a Respect that some thinge may be put as a stocke into the treasurye of every of the saied three Hospitalls. The Legaceys in this Schedule annexed I will to be payed and performed by myne executors, John Griffith, William Bing, and Robert Cole, gent. my servauntes. And I appoynte myne overseers my very good Lordes the Earles of Suffolk and Worcester and the Lord William Howard. And I give my Lord of Worcester a peece of plate of twentie poundes to be provided by myne executors. In witnesse whereof I have set my hand and seale to this my last will with this schedule annexed the daye and yere first above written. H. NORTHAMPTON.

THE SCHEDULE.

Item I will that myne executors, for suche interest as I have, shall assigne over the wardshippe of the Lord Barckley to S^r^ Richard Spencer and M^r^ Thomas Spencer, his greate uncles, to the use of the sayed Lord Barckley, he paying Fifteene hundred poundes for the same to myne executors, beyng neere abowte the chardges I have ben at concerning the same wardshipp. Item I will that all my meniall servauntes now attending in my house shall, yf they will, remayne and contynewe togeather here in my house at Northampton House and possesse theire severall lodginges and chaumbers and receyve theire ordinarye weekely allowance to be payed by myne executors untill Michaelmas next. And that every gentleman of them shall have twentie nobles and every yeoman fyve markes to buye them blackes, to be payed by myne executors. Item I give to my servaunts the severall legaceys hereafter folowing, to be payed by myne executors within convenyent tyme when my debtes shalbe satisfied. To Edward Willis twoe hundred poundes. To Thomas Jermye I forgive his hundred poundes debt and allowe his patent that I procured hym. To Frauncys Windham, John Heydon, Giles Savage, Hugh Cholmeley, every of them one hundred poundes. To William Hodder, Robert Lewis, John Wyn, Thomas Culpepper, John Hickes, Henry Mildemaye, Edward Gent, Andrewe Judd, Christofer Harris, and Arthur Jenney, to every of them fiftie poundes. To John Jaggard and his wife one hundred poundes. To Pancrase Fathers, William Fox, Samuell Fishe, Richard Larder, Peter Webster, and Thomas Scott, to every of them fortie poundes. To Ferdinando Kelley and John Holmes the Taylor, to every of them twentie poundes. To William Dowland and William Bland, to every of them tenne poundes. To William Yeomans and James Foster, to every of them fyve poundes. To Will the kitchinboye fortie shillinges. Item I give to every of myne executors fyve hundred markes for their paynes in the affayers of my Will, and will that they have Allowance in their Accompte of the chardges they shalbe

put unto in those buisynes. Item I give to the Chappell of Dover Castle twentie poundes, and to the poore of Dover Towne twentie poundes. Item I give to Thomas Willis tenne poundes. H. NORTHAMPTON.

[Witnesses] Robert Cotton, Robert Brett, Jo. Amye, Fra. Moore.

Proved in London, 18 June, 1614, by the oaths of John Griffith, William Binge, and Robert Cole, Executors. [Extracted from the Registers of the late Prerogative Court of Canterbury, Lawe, q. 55.]

XVII.—*Notes on the "Bacini," or Dishes of Enamelled Earthenware, introduced as Ornaments to the Architecture of some of the Churches in Italy, &c. &c.* *By* C. Drury Fortnum, *Esq. F.S.A.*

Read Feb. 16th, 1860.[a]

All writers on the history of pottery have more or less alluded to the *Bacini*, or deep bowl-shaped dishes of various sizes and colours, which are to be seen on the exterior of several churches in different parts of Italy. More particular allusion has been made to those found on the churches of Pisa, and various theories have been raised to account for their origin. It is particularly stated by Sismondi, in the "History of the Italian Republics" (i. 354), that the Pisans made great exertions to rid the Tyrrhenian Sea of the Moorish pirates, which had so often destroyed their vessels and ravaged their coasts. Their efforts were specially directed against a certain King Nazaredeck of Majorca, whose cruel acts of piracy had spread terror in the coast towns of Italy and Southern France. Thousands of Christian captives were said to be rotting in his dungeons, or subjected to all the horrors of an oriental slavery. At length, in the year 1113, the Pisans were further stimulated by an appeal from their archbishop, who preached a crusade against the infidels, for the deliverance of their countrymen and fellow-Christians, and for the glory of the Pisan arms. In August of that year the expedition sailed for the Balearic Isles. Tempests were encountered, and the coast of Catalonia became their winter refuge; but in April of the following year Iviça was reached and captured. Majorca was attacked, the town assaulted, and after a year's obstinate defence, fell into the hands of the Pisans, about Easter in 1115. The king was killed, his successor made prisoner, and with enormous spoil the Pisans returned triumphant to their native city. As the Moors are believed to have been the great ceramic artists of that age, it is probable that their productions were eagerly sought and highly prized; and it has been supposed[b] that a quantity of these precious specimens of the potter's skill were secured and brought to Pisa by the captors, where they were built into the towers and façades of the churches as memorials of this triumph. It is not improbable that some of the Moorish buildings of Majorca were decorated

[a] The publication of this paper has by various circumstances been delayed.

[b] Marryat's "Pottery and Porcelain," 2nd ed. p. 11.

with enamelled tiles, as we know to have been the case in Spain. The more costly decoration of Mosaic was well known to the Italians, and the use of some of these *bacini* for a similar purpose, to which their brilliant colours admirably adapted them, would naturally suggest itself. It was, moreover, the habit of the period to decorate the buildings (of the Romanesque style) with circular and lozenge-shaped slabs of coloured marble, mosaic, &c. &c. The palaces of Venice, and their own cathedral at Pisa, are examples, and it was therefore merely applying another material to the same end. This mode of ornamentation by medallions, or lozenges, of coloured marble, mosaic, or in brick buildings of enamelled *bacini* or plates, continued in vogue during the subsequent centuries when "Gothic" had superseded the earlier Romanesque and Lombard styles.

The statement of Passeri, that it was the habit in the fourteenth century to decorate the churches with *bacini* of the *fabrique* of Pesaro, may have a foundation in fact, but that it originated at Pesaro, and that these *bacini* were only of the manufacture of that place, is far from probable.

During a sojourn of a few days at Pisa, I took the opportunity of examining carefully the different churches, for the purpose of ascertaining whether the plates inserted were really of Moorish or Italian character, and also, if possible, of procuring some fragments of the plates themselves. The inaccessible sites of these plates rendered the latter a somewhat difficult task, and my application to the church authorities for permission to detach specimens, were (except in one instance) refused. I will now proceed to state the facts I was able to ascertain, and the accompanying diagrams from rough sketches from some of the *bacini*, &c., &c., will serve to illustrate their style.

My first visit was to a remarkable church outside the walls of Pisa, on the old post road to Leghorn. San Pietro in Grado was built according to tradition on the spot were St. Peter first landed in Etruria. The original church was replaced by the present structure, built before the year 1000. It is a Romanesque basilica; the marble columns of the interior are antique, and probably taken from some building of Roman times. A band of very early and much injured fresco paintings, representing events from the life of St. Peter, extends along the sides of the nave above the columns, and at the spring of the arches, immediately over each capital, the artist has painted a circle to represent the bacini then in use for external decoration. The exterior, which has been much repaired, has many dishes, especially on the north side, those that formerly existed on the south wall having been injured probably by the action of the sea breeze upon the glaze, and their places bricked up.

Those along the top of the wall of the north aisle are mostly well preserved. The sketch fig. 1 will give some idea of the way in which these plates, varying

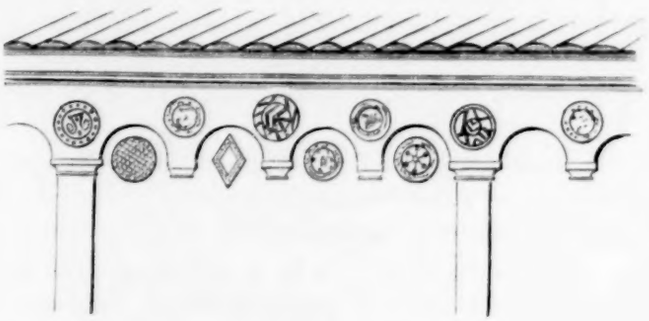


Fig. 1.

UPPER PART OF THE WALL, NORTH AISLE, S. PIETRO IN GRADO, PISA.

in size, are introduced as an ornament to the Romanesque brick architecture. The diagrams figs. 2 to 7, Plate XVIII. are from plates occurring in this frieze. It will be observed that in fig. 2 a bird is rudely represented, in fig. 5 a ship, while fig. 3 is decorated with a cross bordered with blue. Fig. 4 has a Gothic leafage border encircling an object resembling the heraldic charge known as a "water bouget." By borrowing a ladder from a neighbouring farm, and mounting this upon an old table, I contrived to get within reach of two which had been much broken, and succeeded, though not without difficulty from the hardness of the mortar, in detaching some small fragments. They are made of a coarse red earth, hard and heavy, and covered with a white *engobe* under the lead glaze, at once marking their Italian origin.

San Sisto in Pisa had many plates in the façade, the side walls, and the campanile, but they have nearly all fallen out, and their places have been supplied in recent times by *stucco*, painted to represent the *bacini*. Among the real plates remaining I could not discover those illustrated in Mr. Marryat's book, (History of Pottery and Porcelain, p. 12, 2nd ed. Murray, 1857,) but the diagrams figs. 8 and 9, Plate XVIII. give an idea of two which still exist; they are clearly Italian. The campanile has some, and I particularly remarked one of a blue turquoise colour of great brilliancy. San Sisto is a favorite saint with the Pisans, many of their memorable victories having been gained on his day (6th August). It was on that day the expedition against the Balearic Islands sailed, and it would be natural to suppose that this church would be one to which some of the Moorish trophies would have been offered, and where some trace of the Moorish dishes might be

found if any had ever been incrusted in the walls. It is in the Romanesque style, begun in the year 1089, but much repaired at subsequent periods.

San Andrea is a small church of Pisan Romanesque, much altered, but on the exterior are many plates which decorate the campanile and the small arched cornice of the side walls. They partake of the same general character of those in the two former churches. Figs. 10 and 11, Plate XIX. show the design of two examples.

San Francesco is a noble Gothic church of the end of the thirteenth or beginning of the fourteenth century. In the campanile are a few plates. I ascended with a most obliging Frate and was thus enabled to get a very near view of them. Some are small bowls with a wide margin, in form not unlike the old barber's basin but without the notch for the neck, of coarse manufacture and of a green colour without pattern; from several the glaze had scaled off, showing the coarse red earth of which they were made: the glaze I believe to be plumbiferous and the manufacture Italian. Some larger ones were painted in patterns, of one of which fig. 12 is a sketch. This church was undergoing repair, but my application to the superior for permission to have one of these plates removed was met by an excuse, and I was afterwards told that in consequence of the very high prices that had been given for *majolica* of late years these plates are supposed to be of very great value.

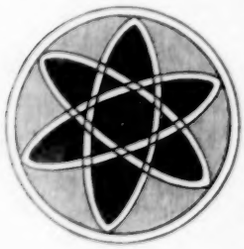


Fig. 12.

ON THE CAMPANILE OF S. FRANCESCO, PISA.

Yellow ground, blue pattern, bordered white.

San Martino is a mine of these *bacini*, the Gothic arched work under the roof being filled with them round every side except the façade, which is more recent. It is a large and fine Gothic church of the fourteenth century; and the manner of their introduction as well as the style of several of the plates is much the same as that of the façade of San Sisto as figured in Marryat, p. 13 (2nd edition). Two of the *bacini* are figured in Plate XIX. figs. 13 and 14.

The church of Sta. Apollonia has not any, as erroneously stated by Mr. Dawson Turner; he is mistaken also in saying that they are "only to be found in the oldest buildings of the style we in England call Norman." He mentions San Francesco, which is a Gothic church of the thirteenth or fourteenth century; they are still more abundant in San Martino, which is also a Gothic church of the same period.

The small church of Santa Cecilia I noticed quite accidentally, and there found matter of considerable interest. It is Romanesque, but much altered internally;



Fig. 2.



Fig. 3.



Fig. 4.



Fig. 5.

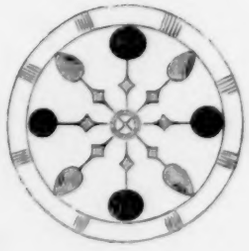


Fig. 6.



Fig. 7.

AT SAN PIETRO IN GRADO, PISA.

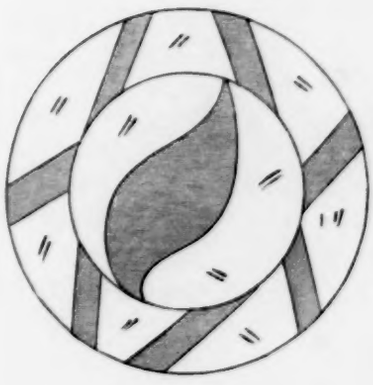


Fig. 8.

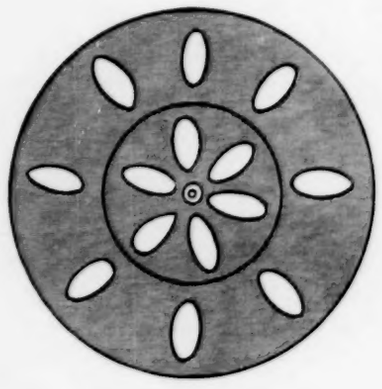


Fig. 9.

AT SAN SISTO, PISA.

Fig. 2. Pale buff ground, bird black outline, marginal pattern brown. Fig. 3. Yellow ground; cross, buff chequered brown, edged blue; four points white; marginal pattern brown. Fig. 4. Pale buff ground, water bouget green, marginal pattern red-brown. Fig. 5. Pale buff ground, ship green. Fig. 6. Whitish ground, circular ends of carbuncle dark blue, leaf-shaped ends red-brown. Fig. 7. Yellow ground, green pattern. Fig. 8. Yellow ground, green pattern. Fig. 9. Green ground, pale buff pattern.

DIAGRAMS SHOWING PATTERNS OF BACINI ON ITALIAN CHURCHES.



Fig. 10.



Fig. 11.

AT SAN ANDREA, PISA.



Fig. 13.

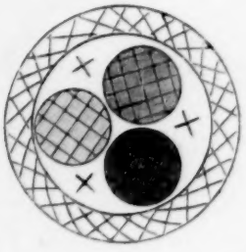


Fig. 14.

AT SAN MARTINO, PISA.

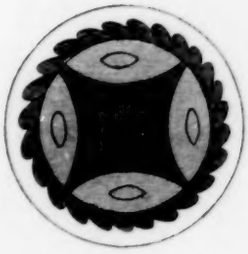


Fig. 16.



Fig. 17.

AT STA. CECILIA, PISA.

Fig. 10. Pale buff ground, blue border, red flower, green leaves. Fig. 11. Deep blue ground, yellow pattern. Fig. 13. Yellowish white ground, outlined manganese, green buds. Fig. 14. Yellowish white ground, yellow, green, and purple roundels. Fig. 16. Green centre and leaf border, yellow ovals, white edge. Fig. 17. Buff ground, reddish-brown pattern.

DIAGRAMS SHOWING PATTERNS OF BACINI ON ITALIAN CHURCHES.

the campanile, the façade, and the south side are decorated with these plates. The arch of the principal entrance, as also of two others on the south side, is remarkable for its Saracenic character, being of horse-shoe form; the mouldings are of terra-cotta. On looking at the *bacini* I noticed several of that style of decoration known as *graffito* or *s-graffiato*, and which is undoubtedly of Italian origin.[a] It is a ware formed of coarse red earth, over which an *engobe* or thin layer of white earth is deposited. The pattern is formed by scratching the design upon this white deposit, and thus showing the dark colour below; the whole is then glazed with a transparent lead glaze. The creamy white colour is sometimes varied by patches of green and brown. But over an arch on the south side, which has been bricked up, I noticed a plate which attracted my attention by its brilliant blue colour and marked oriental character. It was much broken and more than half had fallen out. On making application to the *rettore* I learnt that the church was founded in the year 1103 and consecrated in 1107. I begged permission to ascend the campanile, and detach a portion of the *graffiti* specimens, and also particularly for a bit of the turquoise. Leave was at once most courteously granted, and having procured a ladder I found that the greater part of the plate was loose, and at once secured my prize. It is of quite a different character from those of which I procured specimens at San Pietro in Grado; the earth is very light, sandy, and of pale colour, the glaze translucent, most probably siliceous, and of a brilliant blue, with an arabesque pattern in black painted on the ground of the plate beneath the glaze, in fact an example of what is known to collectors as "Persian ware."



Fig. 15.

FRAGMENT OF BACINO FROM SANTA CECILIA, PISA. Actual size.

[a] I have since received two examples of this variety from one of the Pisan churches.

It is not a true *faience*, but a ware which is well known and very distinctly characterized, being in fact an imperfect artificial porcelain, and having some affinity with the ancient blue and green Egyptian pottery and with tiles found in the early tombs and mosques of Arabia, Syria, &c. It is composed almost entirely of a fine quartzose sand fritted or bound together by a portion of some argillaceous earth.

De Brongniart, *Traité des Arts Céramiques*, vol. i. page 505, speaking of the Egyptian pottery, which is of a very similar character, describes it as "une pâte sableuse, ne renfermant d'argile que ce qui était indispensable pour lier ce sable, et que la petite quantité d'alcali qui s'y trouvait y avait été introduite par la glaçure."

Of the Persian ware he speaks in vol. ii. p. 49, but in classifying this *faience* he has been led into error, the first variety which he describes being now generally known as of the manufacture of Nevers. The second variety is the true Persian, as also is the lustred ware alluded to in the following paragraph. Illustrations of these wares will be found in the *Musée Céramique de Sèvres*, by De Brongniart and Riocreux, plate 39, figures 3 and 6; of the lustred, fig. 16 of the same plate. In the chronological table, vol. ii. page 86, of the *Traité*, the year 1074 is given as the earliest date at which this ware (in the form of tiles) is known to have been manufactured in Persia.

I ascended the campanile of Santa Cecilia, and there found many small plates of the Italian *graffito* ware, of one only of which I could procure an example; the remainder were similar to those of San Pietro in Grado and the other churches, and clearly of Italian manufacture.—(*Vide* figs. 16 and 17, Plate XIX.)

The brilliant reflection of the sun's rays from some of the plates on San Martino led me at first to think that these must have a metallic lustre, and thus point to a Moorish origin; but on more carefully examining them I could not discover a single example. The action of the weather on the glaze sometimes causes a degree of decomposition, and certain opalescent colours similar to what is seen in glass which has been long buried in the earth, but of true *reflet métallique* I could find no instance.

Bologna also adopted this style of ornament, and the churches of San Giacomo Maggiore, San Martino Maggiore, and San Francesco have plates.

San Francesco is a Gothic church of the thirteenth century. On the façade is a cross formed in the brickwork, on the four arms of which plates are inserted. On one of them a crown is represented; on another an eagle, a lamb holding the banner, a stag. These are painted on a cream-white ground in manganese tint, and are

alternated with plates of dark green colour. On the façade of San Giacomo Maggiore, also an early Gothic church, founded in 1267, is a similar cross; plates are also inserted in the frieze. Bologna also possesses the only instance with which I am acquainted of this style of decoration being introduced in domestic architecture. It occurs in the ancient Palazzo Fava in the Via Galliera. It is a good specimen of the Italian Gothic, with ornaments in terra-cotta, and was built about the year 1390. The windows consist of two pointed arches sustained by double columns, a larger arched moulding inclosing them, and in the centre of the spandril, in lieu of what, in northern Gothic, would be a trefoil or cusped circle, a glazed dish or *bacino* has been introduced. These are painted with different devices, but the exceedingly wet weather prevented my taking sketches. These plates also occur on the façade of San Pietro in Cielo d'Oro, at Pavia, and on the front of San Michaele in the same town. I have observed similar plates of glazed ware in the campanile of a church at the small town of Sant Arcangelo, on the road between Cesena and Rimini, and near the banks of the classic Rubicon. In Rome, the towers of the following churches are similarly decorated:—San Lorenzo fuor le Mura; San Bartolomeo, on the island of the Tiber; SS. Giovanni e Paolo; Santa Francesca Romana; Santa Bibiena, near Santa Maria Maggiore. The ancient campanile of the latter church has also green glazed *bacini*, surrounded by a double row of similarly coloured tiles placed edge-ways. A sort of dog-tooth moulding is also formed by green glazed tiles, and is the nearest approach to the decoration of a church tower at Lugano. Over the arch of the *portone* at the "Sala del Cambio," in Perugia, are tiles inserted in the marble frieze, and it is evident they were purposely formed for the place in which they still remain. They are of a brilliant greenish turquoise colour, and bear devices in manganese tint; in effect they are parallel to that of the enamels which so much heighten the ornament of architectural church plate, as monstrances, reliquaries, &c., &c. A frieze of coloured enamelled tiles is seen on the campanile of the church of Santa Maria degli Angioli, at Lugano, founded in 1499. The colours are blueish-green and yellow, and the effect, with the mixed brick and stone-work of the tower, is very brilliant and good.

From the foregoing facts I think it may be inferred that very few of the *bacini* now found in the churches of Italy are other than of Italian manufacture. The adoption of such a method of decoration may or may not have had its origin at Pisa, and was manifestly in great favour there; but I am inclined to think that the story of the Majorcan dishes, captured, and built in as trophies on the church walls, is apocryphal. Passeri's assertion, that Pesaro produced many dishes for this purpose and adopted the manner, is probable; but there can be no doubt

that they were also made at the other early Italian potteries, as Faenza, Castel Durante, &c. It would appear also that the style was discontinued previous to 1400, as I believe that *bacini* do not occur in churches of a later date; and this, coupled with the fact that none of these examples so found have the metallic lustre, would lead to the inference that the Italians were unacquainted with the method of producing this *reverberato* or *reflet métallique* till some time subsequent to that period.

The specimen from Santa Cecilia (fig. 15, *ante*,) is a remarkable and exceptional case. Its marked oriental character and the quality of its paste enable us to classify it as ancient Persian or Damascus *faience*. The constant commerce of Pisa, Venice, and Genoa with the East would be the means of introducing this ware to Italy, and accordingly we find that those pieces of old Persian ware existing in the different collections have, in the majority of instances, come from that country. It is not unlikely that other pieces of similar character and origin to that from Santa Cecilia may exist in other churches, but their inaccessible position and the accumulated dust of centuries renders their detection somewhat difficult. The bright blue one in the campanile of San Sisto may be of this description; possibly, thank-offerings from pious merchants or captains safely returned with their richly-laden galleys from the East. The dish, fig. 8, Plate XVIII. painted with a galley, and fig. 10 having a flower in the centre, have a similarity to known examples of Rhodian origin, but their position rendered a minute examination impracticable. The Italians were not given to restoration; they would alter, add to, or rebuild, but seldom restore in the spirit or letter of the original structure; and I am inclined to think that the fashion of inserting *bacini* once passed, they might remain in their places, or fall out, but would never be replaced. Had it been otherwise, pieces of a later character would be found; but, on the contrary, we see where subsequent repairs have been done the empty spaces have been bricked up, or at most filled with stucco painted to represent plates, as in San Sisto. I am, therefore, inclined to believe that the piece in question had been placed where I found it, certainly more than 500 years ago, if indeed it was not inserted at the time the church was built in 1107; and from this circumstance we have an additional proof of the great antiquity of this very beautiful ware, already known to have been in use in the form of tiles on the monument of *Iconium* (*Konieh*), in Asia Minor, attributed to the times of Sultan Kilidji Arslan and Sultan Ala-Eddin, circa 1074 and 1275. Its manufacture in Persia has been continued even to the present day, but the pieces produced, and of which specimens may be seen in the South Kensington Museum, are inferior in *technique*.

XVIII.—*On a Lamp of "Persian Ware" made for the Mosque of Omar at Jerusalem in* 1549: *preceded by some Remarks on the Pottery and Porcelain of Egypt, Persia, Damascus, &c.* *By* C. Drury Fortnum, *Esq.*, *F.S.A.*

Read April 30th, 1868.

In making the following crude and superficial observations on those varieties of pottery known among collectors and amateurs as "Persian ware," my object is to call increased attention to the subject[a] by adding the few notes which a recent tour through Syria and Egypt, and to Constantinople, has enabled me to gather, and more particularly as an introduction to the notice of the Society of a piece of this ware, remarkable for its beauty, and interesting from its having been made for a mosque of world-wide renown, and also as bearing an inscription informing us of the date of its manufacture, thus giving sure evidence as to the period of the perfection of this very elegant variety of the potter's art.

"Persian" pottery may be ranged into *four great classes*, all of which agree in the general character of the "paste" of which the pieces are formed, although differing greatly in its quality. This "paste" consists of sharp sand, argillaceous earth, and alkali, varied relatively in quantity and quality, and in the finer specimens, which can indeed be ranked as soft paste porcelain, may be characterized as a semi-vitrified argillaceous glass. Its glaze is a true glass, variously coloured by metallic oxides. By the nature of its composition it therefore differs from all other varieties of pottery or porcelain, with one exception, that of a very remote ancestor, the glazed pottery of ancient Egypt. It is not improbable that from this Egyptian root the great family of siliceous wares may have spread throughout the East. By what links these two members were connected we have not yet sufficient evidence to show, but that they are "blood relations" is proved by their composition. Indeed in this, as in other directions, how much so-called "Arabian art" owes to the early Coptic Christians, who preserved the knowledge of processes and handicrafts from the overwhelming flood of Mohammedan desolation in

[a] On February 16, 1860, numerous specimens of the earthenware usually called "Persian" were exhibited to the Society, and on this occasion Mr. Franks communicated much interesting information on "Persian Wares," which he arranged into three classes.—*See Proc. Soc. Antiq.* 2 S. i. p. 94.

Egypt, is a subject of much interest, which, when carefully elucidated, may perhaps prove that many of the most lovely creations of architecture, metal-work, and general artistic manufacture, were from the heads and hands of the down-trodden Copt. I have exhibited a somewhat uncommon specimen of the ancient Egyptian pottery which I acquired at Thebes; it is of the period of the 18th dynasty, and shows the similarity of composition to which I allude. The hieroglyphic inscription on it gives the name of Ammen Em Apt, priest of Ammon ra, and superintendent of the writings of the temple.[a]

The first variety of Persian pottery is that which is mostly decorated with metallic lustre of a yellow golden, a rich brown, or a ruby or coppery character. The ground of the piece is generally creamy white or dark blue; the subjects arabesques with trees, birds, and flowers, the cypress-tree being of frequent occurrence. This variety is of early origin, fragments of broken vessels, tiles, &c. being found in the ruins of very ancient buildings in Persia and Arabia. In Mr. Henderson's collection is a tile having a portion of an inscription in relief, which is considered by M. Schefer, who possesses another portion of the same inscription, to be of the 13th century or early in the 14th. Another remarkable example is a tile in the possession of Baron Davilier, which came from the ruins of the bath-room of Shah Abbas II. in the ancient palace at Ferabad near Ispahan, on which a horseman, supposed to represent the Persian monarch, is figured in relievo, with his favourite hawk upon his hand, flowers, foliage, &c. the whole heightened by ruby metallic lustre worthy of "Maestro Georgio." Others of these tiles, but without lustre, were brought from Persia by M. Mechin, some of which are in the possession of John Henderson, Esq. F.S.A. whose rich collection contains one of the choicest examples, a vase of the greatest beauty of quality and decoration. I have exhibited some cups and a plate of this variety from my own collection.[b]

[a] The following is a translation of this inscription kindly given me by Dr. Birch.

"Libations of water and wine and milk.
"May all libations be made from the table of
"Osiris to the priests of Ammon ra, King of
"the Gods and Superintendent of the writings of the
"temple of Ammon, Ammen Em Apt."

The vessel itself, of the form known as "*Namma*," was used for the pouring of libations, as frequently represented in the hieroglyphics on the temples at Thebes and elsewhere.

[b] Since the above was written, a remarkable wine-jar of this variety of ware has been procured from the district of Isfahan by M. Mechin; it is of lengthened ovoid form, nearly one *metre* in height, decorated in zones, first of plants and leafage, then animals, &c.; the central one with mounted horsemen, dogs, hawks, &c.; next animals and birds; lastly plants, leafage, &c.; the whole of the figures are in *relievo*; the ground

M. Mechin, who recently returned from his second journey into Persia, having previously had his attention called to the subject, took particular pains to discover whether this variety is of ancient or recent date; he informed me that its manufacture has long since ceased, and that fragments of it are found among the rubbish only of ancient buildings. He was enabled to meet with but very few specimens, and these mostly of inferior quality and probably of the *décadence* of the manufacture. The tiles bearing the supposed portrait of Shah Abbas II. who reigned till 1628, can hardly be ascribed to the better period of this variety, and indeed are the connecting link between it and the third. The finer pieces may with greater probability be ascribed to the middle or earlier part of the preceding century. Fragments of very ancient tiles found by M. Mechin, some bearing inscriptions, have recently been acquired for the South Kensington Museum, and others are in the possession of Mr. Henderson.

I may mention that during my recent tour in the East I vainly sought at Damascus and elsewhere for examples of this lustred variety of pottery, nor could I learn, from the many persons of whom I made inquiries, any trace of the existence of such a ware either in Syria, Egypt, or the Levant. The opinion, therefore, which has been advanced, that it is a pottery of comparatively recent date, and probably of Levantine origin, is not borne out by any evidence, but on the contrary there is every reason to conclude that it is of purely Persian origin and early date, ranging from the 13th to the 16th centuries, and now of great rarity. The majority of the fine pieces in collections have been found in Italy, where they have probably been lying unknown and unappreciated for centuries.

I possess two vases of precisely similar character in paste, glaze, and metallic lustre, to the variety just described. They are of the upright cylindrical form so generally adopted for the use of the "Farmacia" attached to the Italian monasteries, 14 inches high, of coarse sandy paste, and glazed with a true glass of a dark blue colour: one is ornamented with raised spiral ribs of lustre colour, between which are what would appear to be inscriptions of the same colour, but which Dr. Rieu, of the British Museum, has been unable to decypher; the neck is banded with a network pattern. The other vase has similar spiral bands of lustre but not in relief, and the ornament between consists of scrolls; on the neck is what appears to be an inscription in the style of early Arabic, but not readable. A vase of similar form and character has been illustrated in Delange's folio work on majolica, now in course of publication in Paris; and two oviform vases of similar

is creamy white, covered with a fine foliated vermicular diapering in golden lustre colour, with which also the relievos are heightened.

stamp were exhibited by Mr. Falkner at the South Kensington Museum; and in that collection are some others of a similar ware but differing in colour. These examples are all believed to be of Sicilian origin, and, like the Rhodian ware, were probably produced by Eastern workmen at the time of the Norman occupation of the island, and may be termed "*Siculo-Persian*," or "*Siculo-Persic*." [a]

Examples of another kind of ware of stanniferous glaze, and decorated with vermicular patterns in coppery lustre colour—generally on a dark blue ground, have been brought from Sicily. These, which would appear to be of more recent manufacture, may with greater propriety be called "*Siculo-Moresque*," and are probably from the potteries of Calata-Girone. They are indeed only a variety of the Hispano-Moresque wares of Spain.

The *second variety* is without metallic reflection in its decoration; the colour is generally creamy white, with flowers, &c. in dark but vivid blue, and some ornament of a reddish brown. The peculiar decoration consists in cutting holes of various forms through the paste, which holes are subsequently filled with the translucent glaze which covers the whole piece, similar to a variety of Japanese porcelain well-known to collectors. Several examples of this kind but of a coarse and inferior quality have been recently imported into Paris, and M. Mechin also procured some in Persia; the pieces of finer quality are, however, very rare, and extremely beautiful, the choicest examples I know being in the collection of Mr. Henderson. I am not yet fortunate enough to possess a specimen. Of its local origin we have no data; it may have been the production of some one family of potters, and regarded as a curiosity or "fantasia." This, or the preceding variety, is supposed to be the "Gombroon" ware of Horace Walpole.

The *third variety*, which is nearly connected by the quality of its paste with the two former, being occasionally of so fine a texture as to be semi-translucent, and in fact an artificial porcelain, is of a pure or a creamy white ground, painted with flowers, fruit, animals and birds, and sometimes with figures of men and women, outlined with manganese colour, and filled in generally with a brilliant copper blue. These pieces are sometimes decorated in imitation of the Chinese, and occasionally have imitations of Chinese marks beneath them. A flask in my own collection is a characteristic example purely Persian in form, sentiment of decoration, and "technique," and having beneath an imitation of the well-known "mandarin" mark, as we also find on some of the early pieces of our own Worcester and Delft wares. Some pieces have figures of men and women partly in relief.

[a] M. Jacquemart considers these specimens to be of purely Persian manufacture imported into Europe.

It sometimes occurs of coarse inferior quality, and can hardly be considered of so old a date as the preceding.

Before entering on the consideration of the fourth and more abundant variety, I may here allude to Persian *hard-paste porcelain*, the existence of which has been declared by the researches of M. Jacquemart, in whose collection are specimens singularly agreeing with Chinese style in some instances, yet having carefully and accurately written Arabic inscriptions, and in others more characteristic of Persian decoration. They differ from the pottery in being heavy; the paste a kaolinic one of "hard" nature, somewhat coarse and partially translucent; but differing in certain details from the Chinese. The use of manganese for drawing the outlines, and traces of the pieces having been baked on coarse sand, are considered characteristics. The occurrence of correctly written Arabic inscriptions cannot however be taken as evidence of Persian origin. A heavy piece of creamy white colour, having round medallions filled with correctly written Arabic sentences in relievo, and believed to be of Chinese manufacture, was taken from the house of a Mahommedan mandarin by a nephew of Mr. Henderson, in whose possession it now is.

The foregoing kinds are of purely *Persian* origin and comparatively little known; the one now to be considered is that generally classed as "*Persian*," "Damas," and Rhodian," or "Lindus" ware. Its decoration is polychrome, the colours being of but few varieties, dark, turquoise, and lilac blues, a chocolate brown, green, manganese black, rarely yellow, and an opaque red. It was a manufacture widely spread, and very productive, particularly of wall-tiles, as decoration to mosques and other buildings. From its Egyptian, or Babylonian, cradle, where bricks glazed with blue and yellow were used from the most remote periods, it probably travelled to Persia and Damascus, and from the former country derived its elegant decoration. In the rubbish heaps outside the walls of the latter, fragments of this ware abound, and I am inclined to think that that venerable city became the metropolis of this variety, which was known, and is mentioned in many of the old European inventories, as "Damas" or "Damascus" ware. Pieces still exist in collections, having silver gilt mountings of the period of Queen Elizabeth. This combined evidence would I think quite warrant the re-adoption of that name for one division of this class of Faience, of course excepting those pieces which bear evidence of their Rhodian origin.

Thence the potters spread, carrying their art and the simple apparatus of their trade. Those who know Eastern countries are aware how independent are all the handicraftsmen of convenience and of mechanical contrivance; the wheel is a

rough and easily-constructed machine; clay may be found anywhere to build the simple furnace; the pigments and the reed-brushes occupy but small space, and the materials for the paste and glaze were easily and abundantly found. The art of mixing these and applying those was inherited by son from father. Any one who has visited Sioot on the Nile will have seen with what few appliances are produced the elegant cups and coffee-pots, water-bottles, and pipe-bowls of that light-red ware so much admired. So also at Constantinople. How rude and primitive are the furnaces of the glass-works at Hebron. So I believe was it with the production of this ware. The potters went to decorate the mosque instead of the tiles being carried from the manufactory miles away, as would be the case in Europe, and thus located themselves in various places, spreading their manufacture far and wide. Where a large work of decoration took place they established their kiln, and worked under the direction of the architect and decorator.

This method of external and internal decoration by glazed tiles was greatly in vogue during the most flourishing period of Mohammedanism, and ranged from Persia throughout Syria and Asia Minor to Constantinople, and also to Mecca and Egypt.[a] This Damascus ware in the form of dishes and other vessels for domestic use must have been equally diffused, fragments occurring very generally in the rubbish of inhabited and of deserted towns. I have some pieces which I picked up among the ruins of Baalbec, thrown out from recent excavations of considerable depth. As wall-decoration I do not recollect seeing any which formed part of the original work of the earlier mosques in Egypt—such as Tooloon at Cairo; but on some of the so-called "Tombs of the Caliphs" *of the fifteenth century*, outside the walls of that city, they occur, and are contemporaneous, forming part of the whole design. At Damascus they are found in the great mosque, but may have been introduced at any time, and are frequent in the mosques of later building. The tombs of Broussa are richly decorated with them; but the most beautiful examples which I have seen are in the mosques of Constantinople and that of Omar at Jerusalem. There are some exquisite panels also in the old palace of the Seraglio at Constantinople; among them some remarkably large and beautiful tiles of purely Persian character, in some instances nearly two feet square, and covered with the most elegant arabesques of foliage, with birds and insects, fruit and flowers, intertwined. Sometimes, as in the tomb of Soleyman the Great, a large wide band of dark blue forms a belt beneath the

[a] In Spain it was also abundantly used by the Arabs and by the Moors—the mosque of Cordova by the former, the Alhambra by the latter; but these tiles were of a totally different composition, being earthenware glazed with a stanniferous glaze, and decorated with gold and copper-coloured metallic lustre.

dome three or more feet in width, and covered with sentences from the Koran in bold and beautifully-formed Arabic characters of pearly white; the walls are panelled with charming designs inclosed in a border, and giving the effect of Persian carpets stretched as a tapestry upon the walls, but having a rich soft glossy surface of admirable effect. The borders and panels are adapted to the walls around, and follow the intricate outlines of the window openings; these filled in with tracery and coloured glass designed to correspond, and producing the most harmonious effects of colour and of form, the border-tiles being each shaped and painted with the care and nicety of a mosaic. Some of the most beautiful examples are the windows of the mosque of Soleyman the Great. To speak in detail of the decoration of the mosque of Omar would be but a useless repetition of what has been often and far better done before. All know how it glows like a turquoise in the brilliant sunshine.[a]

While on the subject of wall decoration I may mention that an ancient custom, still occasionally in vogue on building a new house, was to place over the entrance door a plate or tile of *blue* colour as a charm to ward off "Afreets" and the effects of the "evil eye." I have more than once noticed a common English earthenware plate of our dear old friend the "willow pattern" used for this purpose, and looking oddly enough to our eyes (which certainly were not evilly disposed towards it) over the door of some newly erected house.

The variety under consideration was produced at a very early period; in evidence of which is the occurrence of fragments among the waste and ruins of deserted buildings, and the occurrence of a plate, partly broken, which I noticed over the door of the church of Santa Cecilia at Pisa, and which probably was inserted at the time of its erection in 1107.[b]

I will not here venture upon an enumeration of the various forms and characteristics of the pieces of this ware. Those of purely oriental origin may be distinguished by their more subdued but harmonious colouring, and by their evenness of surface, rich equal glaze, and generally superior quality, and might be classed as "*Damas*" or "Damascus" ware. The lamp I am about to describe, and a jug, also in my collection, are examples.[c]

[a] On the occasion of reading the present paper three tiles were exhibited, two of which I brought from Damascus; the other, of more ancient date, is of the earlier decoration of the mosque of Omar at Jerusalem, previous to its restoration by Soleyman the Great in the sixteenth century.

[b] See woodcut, fig. 15, in the preceding article on *Bacini*.

[c] I should also here refer to a ware of apparently more recent origin, and perhaps the product of Asia Minor in more than one locality, but whose exact habitat has not been definitely fixed. It may be more

The rich collections of Mr. Henderson, Mr. Louis Huth, and Mr. Franks in England, and of Baron Davilier and M. Schefer in Paris, contain examples of all these various qualities.

The reign of Soleyman the Great, 1520—1566, would appear to be the time of its greatest development and perfection in Syria and Turkey, curiously corresponding to that of the "majolica" in Italy; its "*décadence*" probably had a nearly similar correspondence. Dishes of "Persian" ware were imitated and copied by the majolica makers in Italy, and it would appear that the Knights of Rhodes brought Persian or Syrian potters into their island, and there established a pottery. It is probable that the majority of the dishes, jugs, vases, &c. in collections coming from Italy are of this Rhodian variety, which is believed to have some distinctive characteristics, particularly the occurrence of an opaque red colour, used partly in relief for the flowers, &c. Some pieces have the heraldic bearings of the Knights of St. John, and on one in the collection of the Hôtel Cluny at Paris are inscriptions in Arabic; the potters bewailing an exile from their beloved native land.

I have just said that the middle of the sixteenth century was the period of its greatest perfection, and I will now proceed to describe the lamp which I have the honour of presenting to your notice, and which is a work of that period.

Its form is precisely similar to that of the Arabian glass lamps so well known. (See Plate XX.) The three small handles for suspension, and the absence of any bottom to the vase, prove its use; its height is $15\frac{1}{2}$ inches; the whole of the interior is white; on the outer edge of the lip is a band of dark blue colour, covered with an Arabic inscription, in beautifully formed letters of pure white, and which reads,

بسم الله الرحمن الرحيم قال النبي ..... م المومن فى المسجد كسمك فى الماء والمنافق فى المسجد
ك تطير [كطير for] فى القفص

That is to say:—

"In the name of God, the Merciful, the Compassionate, the Prophet (on whom be God's blessing and peace) said: The believer in the mosque is like the fish in the water, and the false believer in the mosque is like the bird in a cage."

Beneath this, and extending to the contraction of the neck, the ground is white,

properly classed as Turkish than Persian, although some pieces are very Persian in style, and may have been a local product of that country. It occurs as cups and saucers, basins, pastile-burners, &c. generally of small size, and is frequently decorated with intricate patterns of many colours, and with crossed lines incised into the paste. It is now generally believed to be of Anatolian origin.



LAMP OF PERSIAN WARE. DATED 1549.

In the Collection of C. Drury Fortnum Esq. F.S.A.

Published by the Society of Antiquaries of London 1870.

and divided by a sort of pendentive ornament from above, and from below, of pale greenish-blue colour, covered with interlaced ornament, of manganese black, and which pendentives unite in a rose of dark-blue; between, in the centre of each space, is a peculiar flower-like bow or knot of foliated ribbon, of dark blue colour touched with turquoise, and having the effect of some orchidaceous flower.[a] To this succeeds a narrow band on the shoulder, of turquoise, panelled in oval spaces of dark blue, on each of which are three tulip-buds in white. Next comes the principal belt, from which spring the three handles for suspension; this belt is also of dark blue, covered with Arabic characters in white, and which read—

يا الله المحمود فى كل افعاله الله ولى التوفيق يا خفى الالطاف نجنا مما نخاف

"O God! praised in all thy works, God, dispensator of prosperity, Oh thou author of secret graces, save us from that which we fear."

To this succeeds the wider part of the vase, covered on a white ground with a similar decoration to that of the neck; underneath is the third blue belt, with white inscription, and reading—

قال رسول الله صلى الله عليه وسلم ان الله تعالى طيب لا يقبل الا طيبا عن ابى هريرة رضى الله عنه

"The messenger of God (on whom be God's blessing and peace) has said: Verily God the Most High is good, and receives none but the good. [This saying is recorded on the authority] of Abu Hurairah [one of the disciples of Mohammed], may God be pleased with him."

Lastly, round the projecting foot of the vase is a series of small oblong white panels, on which are written, in somewhat faint black characters, what reads as follows:—

. . . . . ول دريا بيه كم از نقده اشرف داد در فى سنه ٩٥٦ فى شهر جمازيل اولا نقاش الفقير الحقير مصطفى

. . . . . "In the year 956, in the month of Jemazi-l-oola. The painter is the poor, the humble, Mustafa."

I am indebted to Dr. Rieu for the translation and transcription of these inscriptions. He states, in reference to the remaining portions of the lower inscription, "The few words before the date are, to me at least, unintelligible. Some of them appear Persian, others Turkish. The passage being defective, and probably incorrectly written, it would hardly be safe to say to which of the two languages

[a] This peculiar flower occurs also on a plate, and on a Persian carpet in the possession of Baron Davilier.

it should be assigned, much less to attempt a translation. The date of the Hejrah corresponds to June 1549."

Hence we learn that the lamp was made in the year of the Hejrah 956, corresponding with 1549 of our reckoning, which is precisely the year when Soleyman the Great restored and redecorated the mosque of Omar with tiles, &c. as we learn from the inscription over the "paradise gate" (*vide* De Vogue's *Le Temple de Jerusalem*). The lamp was no doubt made for that sultan, and the poor painter ventured to record his name and the date on a part of the foot which would not be visible from below when suspended. This was done by means of three chains, one of which attached to each handle passed against and over the lip, and united at some distance above, where an oviform globe of the same material was placed, from which a single stouter chain passed to the roof of the mosque, or to a large hoop similarly suspended from the ceiling, and from which several lamps were hung to form a sort of corona. This method was more in use for the smaller glass lamps, the centre being occupied by one of greater value and importance. The question naturally arises, How could this opaque vase be used as a lamp? It is bottomless, and therefore nothing more than a shaped tube; but probably to the lower rim was attached a wire ring, in which one of the ordinary glass oil-cups was fitted as it would be to a metal lamp, the Persian-ware vase acting as a shade above, from whose white interior the light was reflected downwards. The oviform balls, representing ostrich-eggs, are still to be found in some mosques. In Mr. Henderson's collection, and in that of M. Davilier, are some which are remarkable as being decorated with winged cherubim; these were probably used in some Coptic church. Those I observed in mosques were yellow green, and some white with blue ornament, but few of the glass lamps have escaped.

The only other instance known to me of a lamp of Persian ware occurs in the mosque of Soleyman the Great at Constantinople, where it occupies the most honourable position, and, though much broken and begrimed with filth, is regarded as a priceless treasure. I am informed by M. Mechin that none exist in Persia, nor have they been observed by him elsewhere, or by any of the travellers of whom I have made inquiry on the subject. I am told, however, that in a remote mosque of the dervishes at Cairo, the "Urlair," near the gate "Bab el Hal," a smaller one existed, which Dr. Meymar vainly for years essayed to purchase, receiving for final answer that it was sacred, and, were he to give its fill of diamonds, it should not be removed from the mosque.[a]

[a] Since the above was written M. Schefer has acquired a lamp of somewhat similar form, but of smaller

It remains for me to state the history of the discovery and acquisition of this lamp. In the year 1865, a friend of some influence, then residing at Jerusalem, obtained permission to explore and make sketches in the more remote corners of the mosque of Omar, and was soon enabled to make himself esteemed by the guardian of the building, from whom he obtained information and opportunities of observation. A long-neglected lumber-room was entered, and there, in a corner, veiled by the accumulated dust of years, was the lamp; two of the handles broken, and a piece from the lip, told why it had been stowed away, but *when* no one could answer; the sequel is natural—it came into the light of day, and was kindly ceded to me by my friend.

I cannot conclude this notice without referring to the very interesting and instructive chapters on the pottery and porcelain of Persia, &c. in the "Merveilles Ceramiques" of Mons. Jacquemart.

dimensions and ruder execution; it is of earlier date, "portant sous le pied l'inscription 'fait par *Us Elainy Ettoureizy* xv^{e} siecle.'" (Guide au Musée Oriental, Paris, 1869, p. 35.) The ground is greenish black, with two zones of Arabic inscription and one of leafage "reserved" in white; a fine vermicular diapering of similar nature fills up the intervals of the lettering, &c. This extremely interesting specimen was received, I was informed, from Asia Minor, and was exhibited at the "Exposition des Beaux Arts" in Paris, 1869.

XIX.—*A Mutilated Roll of Instruments relating to the Hospital of St. Edmund, at Sprotborough, near Doncaster; with prefatory remarks by* EDWARD PEACOCK, *Esq. F.S.A. Local Secretary for Lincolnshire: in a Letter addressed to Charles Spencer Perceval, Esq. LL.D. Director.*

Read May 6th, 1869.

DEAR SIR,

I forward you herewith a transcript of all such portions as can be read of a mutilated roll in the possession of Sir Joseph William Copley, of Sprotborough, in the county of York, Baronet. I am indebted for my copy to the courtesy of Charles Jackson, Esq. of Balby. The handwriting of the document is not much more modern than the date of the last instrument contained in it. It was certainly executed during the fifteenth century, probably about the middle of that period.

Of the Hospital of Saint Edmund the King scarcely anything whatever is at present known, except the few facts furnished by this very imperfect record. The late Mr. Hunter in his *South Yorkshire*[a] tells us, quoting the *Valor Ecclesiasticus* as to foundations in the parish of Sprotborough, that there was "a chantry or free chapel of Ancres juxta Doncaster," and that this establishment was endowed with "a manse for the cantarist, a meadow called Ancres-ing, and lands at Newton producing annually 8*l.* 17*s.* 8*d.*" That learned antiquary conjectured that this was probably the hospital of St. Edmund which Dodsworth had stated was distant from Sprotborough church a mile and a half.[b] The discovery of the evidence now before us removes all doubt on the matter, for Sprotborough church is little more than that distance from the bridge of Doncaster, near which, as appears from the documents now printed, the hospital was situated; and the parish runs down to the river Don, which is crossed by the bridge.

As to the origin of this hospital we can say nothing. The foundation-charter, if indeed such a record ever existed, must have perished before this charter-roll was compiled, or we should have found it set forth at the head thereof, or possibly immediately after the Papal bulls. Humble institutions of this kind were widely scattered: of most of them but very slight historical memorials exist. It is not

[a] i. 349.

[b] See Tanner, *Not. Mon.* Yorkshire, Sprotburgh.

improbable that this hospital of St. Edmund, and many others of like character, were never founded in the strict legal sense of the term; but that a few pious persons, having gathered themselves together, erected a house of religion on a plot of waste land, and continued to hold the same without any definite title through the good will of the lord of the fee.

The institution appears to have been twofold,—consisting of a master, chaplains, and infirm persons, with two or possibly more anchoresses attached to their body. The memory of these religious is clearly retained in the name Aneres-Ing" given to their meadow in the *Valor Ecclesiasticus*.

Of Thomas FitzWilliam, the grantor of the first charter, and of his son William FitzThomas or FitzWilliam, nothing need be said here. Almost all that can be told concerning the earlier members of this illustrious house has already been published.[a]

I am, yours faithfully,

EDWARD PEACOCK.

[Roll, 2 feet 9 inches × 8 inches.]

BULLE HOSPITALIS SANCTI EDMUNDI REGIS ET MARTYRIS JUXTA PONTEM DONCASTR'.

. . . . . dilectis filiis infirmis fratribus Sancti Edmundi juxta Pontem Doncastr' salutem et apostolicam benediccionem . . . . . est nos facilem prebere consensum et vota que a racionis tramite non discordant . . . . . dilecti in domino filii vestris iustis postulacionibus grato concurrentes assensu domum vestram . . . . . mcia regulariter unius animi sub beati Petri et nostra proteccione suscipimus et presentis . . . . . entes ut de ortis et pomeriis vestris seu de nutrimentis animalium vestrorum . . . . . vel extorquere presumat. Capellanum quoque ydoneum vos habere concedimus, qui in capella . . . . . Indulgemus insuper ut pro sepultura vestra et eorum qui de familia vestra sunt ibidem . . . . . ergo ut nulli omnino hominum liceat hanc nostre proteccionis seu constitucionis paginam infringere . . . . . Si quis autem hoc attemptare presumpserit indignacionem omnipotentis dei et beatorum . . . . . incursurum. Datum Veller' iij kalendis Aprilis . . . .

Confirmacio Bulle predicte.

. . . . . dilectis filiis magistro et fratribus domus infirmorum Sancti Edmundi juxta pontem Doncastr' [bene]diccionem. Cum a vobis petitur quod justum est et honestum tam vigor equitatis . . . . . solicitudinem officii nostri ad debitum perducatur effectum. Ea propter dilecti in domino . . . . . concurrentes assensu domum vestram Sancti Edmundi predictam omnesque libertates im . . . . . Romanis pontificibus sive per privilegia vel alias indulgencias vobis et domui . . . . . pertinenciis suis necnon libertates et exempciones secularum exaccionum a regibus . . . . . fidelibus vobis et dicte vestre domui indultis sicut eas iuste et pacifice possidetis

[a] Hunter's *South Yorkshire*, i. 333; ii. 93.

[auctori]tate apostolica confirmamus et presentis scripti patrocinio communimus . . . . . hanc paginam nostre communicionis infringere vel ei ausu temerarie contraire . . . . . presumpserit indignacionem omnipotentis Dei et beatorum Petri et Pauli apostolorum . . . . . Datum Rome apud sanctum Petrum xv kalendas Maii Pontificatus nostri anno nono.

Carta Thome Fitz William[a] *in primis Anachoritis facta.*

. . . . . ego Thomas filius Willelmi intuitu Dei pro salute anime mee et omnium antecessorum meorum . . . . . dedi et hac presenti carta mea confirmavi Anabille et Helene sororibus inclusis . . . . . octo quartaria frumenti ad earumdem sustentacionem in tota vita sua annuatim . . . . . inclusarum memorato loco futuris temporibus invicem sibi succedentium que predicta . . . . . de Sprotburgh per manus heredum meorum vel assignatorum suorum. Que predicti herede[s sine difficul]tate et impedimento reddent annuatim, scilicet duo quartaria ad Natale domini . . . . ad Pentecosten et duo infra octabas Sancti Michaelis. Cum vero contigerit unam vel utramque inclusarum . . . . . vel forte locum vacare inclusarum tamdiu predictum frumentum vel medietas . . . . . inclusa sacerdotibus dicti hospitalis Beati Edmundi Martyris ab heredibus meis vel eorum assignatis . . . . . diebus certis pro anima mea et antecessorum et heredum meorum per bonorum virorum consilium . . . . . vel incluse prefato inclusorio fuerunt institute. Hiis testibus Domino Waltero . . . . . do Priore de Blida Domino Petro de Percy Domino Johanne filio Willielmi Ambrosio de . . . . . militibus Roberto de Sprotburgh clerico Eugñi et Radulfo de Kaleham fratribus et aliis.

[*Carta*] *Willelmi filii Thome Fitz William*[b] *secundo facta Anachoritis.*

. . . . . ad quos presentes litere pervenerint Willelmus filius Thome de Sprotburgh salutem in domino . . . . . me caritatis intuitu pro salute anime mee antecessorum meorum et heredum meorum dedisse [et car]ta mea confirmasse Anabille et Helene sorori sue filiabus Jordani de Insula Ana[choritis] juxta pontem Doncastr' omnibus diebus vite sue et omnibus anachoritis successoribus suis . . . . . quod quondam habuerunt in predicto Hospitali Sancti Edmundi videlicet tempore . . . . . In hiis nominatim quod Custos dicti hospitalis eisdem anachoritis et omnibus . . . . . honore prout decet in omnibus exhibebit et missam horas canonicas pro salute anime . . . . . fidelium defunctorum in dicta capella ad honorem dei et juxta libitum . . . . . Volo eciam et concedo quod dictus Custos dicti Hospitalis vaccas p' . . . . . includendarum racionabiliter secundum (?) aysiamenta predicte domus tanquam sororibus . . . . . propriis sumptibus faciet custodire. Preterea literium pro lectis fa[ciendis], communiam in curtilag' cum omnibus aysiamentis et

[a] Sir Thomas FitzWilliam, grantor of this charter, lived in the time of Henry III.: the date of his death towards the end of that reign is not exactly known. If it be allowable to restore the name of the prior of Blythe, by reading [Theobal]do, the charter may be dated between 1260 and 1272, as in the former year Theobald became prior of that house. His predecessor was named Gilbert, a name which in the ablative would not give the final syllable *do*.

[b] William, son of Thomas, was heir to Sir Thomas FitzWilliam. Anabel and Helen de Lisle, the two ancresses in whose favour the first charter was made, were still alive at the date of this. It is probably somewhat earlier than the fine which follows.

pertinenc[iis] ubique pertinentibus sine difficultate seu . . . . . et contradiccione vel calumpnia . . . . . omnibus ibidem includendis omnibus diebus vite sue predict' Custos inveniet et in [A]nabille et Helene et omnes ibidem includend' esse concedo participes Insuper dictus . . . . . singulis concedo duo quartaria frumenti de orrio dicti Custodis scilicet . . . . . sine . . . . . et contradiccione. Salva tamen in omnibus predictis jurisdiccione ad eñ . . . . . In cujus rei testimonium presentibus sigillum meum apposui. Hiis . . . . . Doncastr[9] Michaele de Adwycke Willelmo filio Henrici de eadem Roberto . . . . . cum multis aliis.

[Fin]alis Concordia.[a]

. . . . . domini regis apud Eborum a die Sancti Johannis Baptiste in unum mensem anno regni . . . . . coram Johanne de Vallibus Willelmo de Saham Rogero Lufday Johanne de Mes . . . . . de Suddyngton Justiciariis itinerantibus et aliis Domini Regis fidelibus tunc ibi presentibus [inclu]sas sub capella Sancti Edmundi extra Doncastr[9] querentes et per Thomam Gocelyn positum Willelmum filium Thome defortiantem de xxiiij quarteriis frumenti que eis aretro fuerunt . . . . . debet unde placitatum fuit inter eos in eadem curia, scilicet quod predictus Willelmus . . . . reddent singulis annis imperpetuum predictis inclusis et aliis . . . . . ad quatuor terminos anni scilicet ad festum Sancti Michaelis duo quarteria frumenti . . . . et ad festum Pentecostes duo quarteria frumenti. Et pro hac recognicione concessi[one] quiet[9] tam pde se et de aliis inclusis que eis succedent omnia . . . . . concordia facta fuit.

The next document is without heading, and so imperfect as to be quite unintelligible—"Isabella que fuit uxor domini Willielmi Fitz Willielmi . . . . Johannes filius Briani de Thornehill," occur in it. "Datum apud Sprotburgh vij die mensis Aprilis."

Scriptum Donacionis.

More imperfect than the last. "Elizabetha fitz Willielmi domina de Sprotburgh"[b] conveys to Thomas de Sprotburgh certain lands: among others names of places which cannot be read, Aukengg and Rycroft occur. Mention is made of "Johannis de Neuton capellani." "Edmundo fitz William[c] . . . . . Harlyngton Roberto Barr[9]" may be made out among the witnesses. Date 1384.

[a] The fine of the copy of the record of which this is a fragment was levied in the 8th year of Edward I. as appears by Mr. Hunter's note (*South Yorks.* i. 336) of a more perfect copy in a MS. collection at Milton. The claim, it also appears, was for 24 quarters of wheat, which were in arrear of an annual rent of eight quarters, no doubt the gift of the conuzor's father recorded in the first charter.

[b] Widow of Sir John FitzWilliam, of Sprotborough, and "de Arkeseye joust Doncastre," who died on or before 1385. In 1364 he had (says Hunter, i. 338) the King's licence to amortise land to the use of the master and chaplains of the hospital of St. Edmund of Sprotborough. Dame Elizabeth was a daughter of the house of Clinton, but her place in the pedigree is not clear. The *Rotuli Parliamentorum* of 1389 (iii. 260) contain a curious petition from Sir Thomas Metham, from which it seems Sir John FitzWilliam was murdered by Roger Spark, a servant of John Aske, of Ousthorp.

[c] Probably Edmund FitzWilliam, ancestor of the family of that name, of Wadworth and Aldwark. Hunter's *South Yorkshire*, ii. 54.

A document without heading. A mere fragment, "Aukengę" and "Bentlay" mentioned. "Tho^{s} Knapnaue capellanus" occurs. Date 1409.

[In dorso Rotuli.]

Scriptum Donacionis.

Omnibus Christi fidelibus ad quos presens scriptum pervenerit Robertus Waterton[a] . . . . . jure Margarete uxoris sue et prefata Margareta eius vxor . . . . . salute animarum nostrarum et anime Johannis fitz William nuper viri dicte Margarete et . . . . . dedisse concessisse et hoc presenti scripto nostro confirmasse Roberto Vincent . . . . . liberum hospitale Sancti Edmundi Regis et Martyris juxta pontem Doncastr^{r} et . . . . . de Sprotburgh totaliter spectans prout a tempore . . . . . in territorio de Scauceby[b] ac omnibus aliis proficuis et commoditatibus tam . . . . . ultimo capellano hospitalis predicti aut aliis predecessorum suorum illa . . . . . quod dictus Robertus aut alius capellanus nomine suo infra dictum hospitale in officio . . . . . et alia divina servicia celebrando prout decet. Et nos vero dictus Robertus de Waterton . . . . . predicitur et Margareta vxor mea hospitale predictum cum omnibus . . . . . terminum vite sue warrantizabimus et defendemus. In cujus rei testimonium . . . . . apposuimus. Hiis testibus Leone Domino de Welles[c] Thoma[d] Clarill Willelmo Sca . . . . . [ar]migeris

[a] Robert Waterton the younger, of Methley. Whitaker, *Loidis* and *Elmete*, 268. He would appear to be identical with Robert Waterton esquire, upon whose death several writs of inquiry issued (Esch. 3 Hen. VI. No. 16) as to what lands, &c. he died seised of in Nottinghamshire, Lincolnshire, and Yorkshire. By the inquisitions taken in pursuance of these writs, it was found that he died seised of the manor of Northleverton, co. Notts, held of the Archbishop of York in socage by the service of 11*s.* per annum; of the manor of Westburgh, co. Linc. held of the King *in capite;* of the manors of Brotton, held of the King *in capite*, and Everingham, held of the Archbishop of York, and of lands at Skynnergreve, in the county of York, all as tenant by the curtesy, these manors being of the inheritance of his late wife Joan, to whose son and heir Robert Elys they all remained. This Robert Elys was then 40 years old and upwards. He was found to have died on Wednesday next after the feast of St. Hilary then last past (Jan. 17, 1425), his heir being his son Robert Waterton, aged 16 years and upwards. Joan, who thus figures as the first wife of Robert Waterton, was a daughter of William de Everingham, and widow of Sir William Elys, and (with a sister) coheir of her brother Robert de Everingham, who died 44 Edw. III. (See Ord's Cleveland under Skinningrove.) Robert Waterton died, it will be observed, between the execution of the first and the second of the two charters in the text, and it is curious to find his widow confirming her own and her late husband's deed within two days of his decease. Sir Robert his father must have survived him, for he himself is returned as holding no other lands than those which he had by the curtesy. His son Robert also must have died without issue, as the daughters of Lady Welles became the coheirs of their uncle and grandfather, and as such made partition of the estates 26 April, 2 Hen. VII. according to a deed cited in Burke's *Landed Gentry*, ed. 1863.

[b] Scawsby. Scalchebi, *Domesday*; Scauceby, *Kirkby's Inq.*; a hamlet in the parish of Brodsworth.

[c] Leo Lord Welles, sixth Baron by writ, killed at the battle of Towton 1461; he married a daughter of Robert Waterton the elder, of Methley, who has been variously called Jane and Cecily.

[d] Thomas Clarel, of Aldwark, was father of this Margaret, widow of John FitzWilliam. He was drowned in the River Don 1st May, 1442. It is more probable that it was his son who witnessed this donation. This person was aged 40 years at his father's death.

Johanne Dawnay et aliis militibus. Datum apud Methlay xij° die Janu[arii] . . . . . sexti post Conquestum Anglie tercio.

Scriptum et Confirmacio Donacionis predicte.

Sciant universi Christi fideles quod ego Margareta Domina de Sprotburgh que fui vxor . . . . armigeri nuper vxor Johannis fitz William de Sprotburgh in mea pura viduitate . . . . . et confirmo donacionem et concessionem per prefatum Robertum nuper virum meum . . . . Vincent capellano de libero hospitali Sancti Edmundi Regis et Martyris juxta pontem Doncastr[9] . . . . . commoditatibus in dicto scripto nostro specificatis. Et ulterius per presentem cartam meam . . . . . Vincent do et concedo cum omnibus juribus proficuis et commoditatibus in predicto scripto con . . . . . Vincent ad terminum vite sue modo et forma prout per prefatum Robertum Waterton nuper . . . . . scripto expressatur volens et concedens Radulfo capellano cantarie in Sprotburg . . . . nomine et jure quantum in me est prefatum Robertum Vincent in dicto hospitali . . . . . inde libet prout decet. In cujus rei testimonium presenti carte mee donacionis . . . . . confirmacionis sigillum meum apposui. Hiis testibus Leone Domino de Welles Th . . . . . Johanne et Roberto fratribus meis Willelmo Scargill Thoma Womwell Armigero . . . . . Methlay die Veneris decimo nono die mensis Januarii Anno Domini millesimo . . . . . et anno Regni Regis Henrici sexti post Conquestum Anglie tercio.

Hec subscripta noviter facta per Robertum Vincent in sua Cantaria juxta pontem Don . . .

In primis in choro j wyndow of stone iren and the makyng thereof.
j new auter, ij new auter clothes, j new corporax with a case of grene damask.
ij new frontels with frenges of silk a for the haluyng of them.
ij tables new made and paynted, ij new ymages paynted.
ij new tabernacles to the ymages, ij base stones.
j new vestment of bordalesawndre,[a] j new kyst for vestmentes, and j new . . . . .
j newe canope with the box, new deskes, formes, and j new celour in the p[r]c . . . .

In Corpore Ecclesie.

ij new auters with coveryng of borde, ij s. vj d.; iiij new ymages Katerin, Mathewe, Thomas, and William, with . . . . . stones and the tabernacles, xiiij s.; j new wyndow made at Saynt Thomas auter, xij d.; j ne[w] tabill paynted with a crucifix, Mari and John; j new hynged laumpe, xij d.; j . . . . Christofer, ij s. iiij d.; new formes with the makyng, iij s. iiij d. Also Mari and Mighel . . . . .; j new clok with all the pertenance, xxiiij s.; j new dore made into the gardyn, xviij . . . . . for gystes, plauñch,[b] stoghes,[c] and nayles; j new grece[d] to the chamber within the kyrk . . . . . new dore; j new stone wyndow made in the same chaumbre.

[a] An eastern fabric. It probably took its name from the city of Alexandria. Raine, *Fabric Rolls of York Minster*, 338. Peacock, *Eng. Church Furnit.* 182.

[b] Planks.

[c] Stooths. Pieces of wood used to make the framework of plaster partitions. The word is still in use.

[d] A step, or perhaps flight of stairs. "Grece or tredyl or steyre, gradus." *Prompt. Parv.* i. 209.

In the Parlor.

j new chimnay[a] of lyme and stone with ij harthes and a doubill pype, iij li.; one new plauñch to the chaumber above the parlor, iiij s.; j new stone wyndow half glas, iij s. iiij d.; new boukes; j new lavatory, ij s.; j new Almary, vj s. Sum total .

In the Chaumber over the Parlor.

v grete new gystes; v grete new cupils; ij walplates with the . . . . . in the stone thake,[b] xviij s.; j new dore, xij d.; j new grece, xij d.; ij . . . . . thak stones and thekyng ther of, xviij s.; j new wyndow glased thet one half, iij s.

Also j new kechrn with a littill . . . . . a lede, a synke, and alle the tymbir in . . . . . .

Also in dikyng[c] and wode setting aboute the grete medow . . . . vj s. viij d. In making of a drawell, palissyng[d] gate, making a wall, ... the place, xiij s. iiij d. In cleansing and ekyng[e] of the grate ponde and making of . . . . .

Apud Neuton.

ij lath endes new made, iij li.; ij new chambers and the endes . . . . spensis, dores, wyndowes, garners, and j privey, iiij li. x s.; . . . . and busyng and mendyng of an ouchote[f] of the . . . iij s. iiij d. Also . . . . . wallyng, thekyng, dawlyng, nalyng at the other two . . . . Also in all costages for makyng of a new house by the . . . . . and in all thingis . . . . .

[In another hand.]

Also by hye ferete[g] for pavyng of xij rode, the stone new boght and eich new . . . .

Also for makyng of iiij new arches, the sydes of new hewyn stone with tymber aboue . . . under the arches with grete . . . . . .

freestone iustly semed and with rugh sto . . . .

ffor pauyng, wallyng, by the dyke sides in the ank . . . . .

Also for the marig of amay of my kyn[h] in all thynk . . . .

Also makyn vij new bellys . . . . .

Also j new chalys xxiiij s. and medyng of an old messe boke . . . . .

Also to the makyng of ij new belles at Sprotburgh.

[a] In documents of this age chimney is usually understood to signify not the flue for carrying away the smoke, but the iron grate in which the fire burned. We have evidence here of its use in the modern meaning.

[b] The rough thin Yorkshire flags with which many of the houses and churches in that neighbourhood are still covered.

[c] Making ditches or cleansing them. The word is still common.

[d] Paling gates, *i.e.* nailing thin perpendicular pales over the horizontal framework.

[e] Enlarging. [f] Outshot. [g] A shrine, *feretrum*.

[h] "The marriage of a maiden of my kin" seems meant, but why entered in this account?

XX.—*On a Chalice and Paten belonging to the Parish Church of Nettlecombe, in the county of Somerset, with Remarks on Early English Chalices.* By Octavius Morgan, *Esq. M.P., V.P., Local Secretary for Monmouthshire.*

Read December 2nd, 1869.

The remarkably beautiful Chalice and Paten which I had the pleasure of being able to obtain for exhibition at one of the Society's meetings[a] belong to the church of the parish of Nettlecombe, in Somersetshire. They are objects of very great interest, not only from their beauty but also from their antiquity, and the very perfect condition in which we now see them; and this interest is greatly enhanced by the fact of their being of English manufacture, and some of the very earliest remaining examples of English goldsmith's work. In addition to this we have some curious documentary evidence of the manner in which they were preserved, and so have come down to our time.

The chalice and paten are of silver gilt. Their forms are elegant; both were originally ornamented with enamels, and, although they have been in use for many centuries, they have sustained but little injury. The chalice (see Plate XXI.) stands very nearly six inches high. The bowl is in form between a cone and a hemisphere, that is, the bottom is broad and round, whilst the sides continue straight and conical, a form which is rather indicative of its date. This bowl is supported on a hexagonal stem, divided into two portions by the knop, which is a beautiful piece of goldsmith's work, formed by the projection from the angles of the stem of six short square arms, each terminating in a lion's mask, or in proper heraldic language "a leopard's head," and having the intermediate spaces filled up with elegant flowing Gothic tracery of pierced open-work (see *a*, Plate XXI.). The lower part of the stem rests on a curved hexagonal foot, being united to it by Gothic mouldings, and the foot terminates in an upright basement moulding, which is enriched with a small vertically reeded band. One of the six compartments of the foot was ornamented, as is usual in ancient chalices,

[a] See *Proc. Soc. Antiq.* 2 S. iii. 382.

by a representation of the Crucifixion. The metal of this compartment has been cut out, and a silver plate engraved with the Crucifixion has been rudely riveted in (see *b*, Plate XXII. and *c*, Plate XXI.). This silver plate is, I think, the original work, and it was formerly enamelled—for it would probably have been found easier and more convenient to prepare the enamel on a small separate plate, and then fix it in its place, than to have subjected the whole chalice to the heat of the enameller's furnace, which must have been the case had the enamel been done on the foot itself. The silver plate is deeply engraved, or rather the metal is tooled out to receive transparent enamel in the style of the work of the fourteenth or beginning of the fifteenth century, and small traces of the enamel with which it has been filled may still be discovered. Its present condition may perhaps be explained by a tradition which still lingers in the parish, that a certain churchwarden took the enamel for dirt, and carefully picked it out in order to restore the silver to, as he thought, its proper brightness. It will be at once seen that the design was made for the place, from the peculiar attitude of the figure, the arms being drawn up over the head, to adapt it to the form of the compartment.

The paten (see Plate XXII.) is $4\frac{7}{8}$ inches in diameter, with a narrow moulded edge and a brim like an ordinary plate, within which is sunk a six-lobed depression. The centre points from which the workman formed the lobes are still visible, and the spandrels between the lobes are filled with a small radiating ornament as is usual in similar early patens, which are not unfrequently met with. In the centre is a still further depression, in which has been inserted from the back a small silver plate having, in transparent enamel sunk in the metal, a representation of the vernacle or face of our Saviour surrounded by a cruciform nimbus. This has fortunately escaped the manipulations of the churchwarden, and remains perfect. This central depression with an inserted plate of enamel is very unusual, the surface of patens being usually made as smooth as possible. The back of this small plate is gilt, and engraved with the sacred monogram ihc in black-letter character of the fifteenth century (see *a*, Plate XXII.).

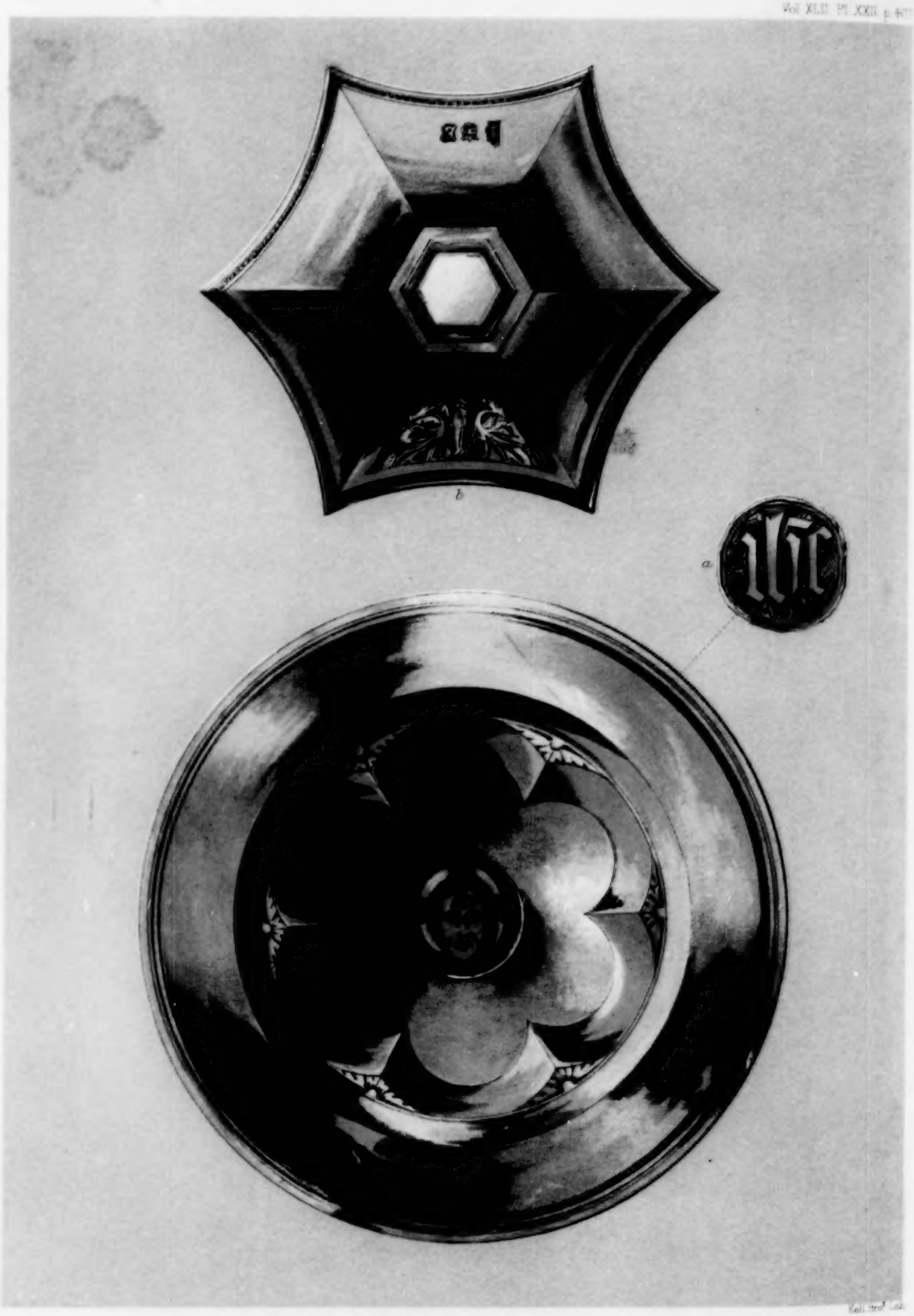
Both these pieces of plate have the English hall marks very clearly and distinctly stamped upon them, which gives us information as to their age; but, from circumstances which I shall mention, not quite so precise as we could wish. These marks are three—no more being then in use. The first is the leopard's head crowned, indicating that the articles had been assayed by the Goldsmiths at their hall and found of correct standard. The second, being the maker's mark, is a dimidiated fleur-de-lis. Every goldsmith or worker in gold and silver



CHALICE BELONGING TO NETTLECOMBE CHURCH.

a. Profile of Knop. b. Hall-mark. c. Plate inserted in the Foot.

Published by the Society of Antiquaries of London 1870.



PATEN BELONGING TO NETTLECOMBE CHURCH.

a. Monogram from the bottom of the Paten. b. Front View of Foot of the Chalice.

Published by the Society of Antiquaries of London. 1870.

was required by statute to have a distinct mark or sign of his own by which his work could be identified. The third is the annual letter, by which the year when the piece of plate was made might be ascertained, so that if it should turn out that the silver was below the proper standard, and had passed the assay of the Goldsmiths' Company, it might be known who was warden of the Company that year when a false assay was made; whilst the maker's mark would indicate the goldsmith who had made the fraudulent article. Some years ago I paid much attention to this subject, and, through the kindness of the Goldsmiths' Company, who allowed me to examine their ancient records, and the inspection of very many pieces of ancient plate, I was enabled to construct a set of tables showing the series of annual letters used from the earliest period of their adoption. These tables formed part of a series of papers written by me on the subject, and published in the Archæological Journal in 1853. The arrangement was this: A certain alphabet was taken and continued for a period of twenty years, each letter indicating a year; at the expiration of the twenty years another alphabet was adopted, usually of a different character, and so on for each succeeding twenty years, and the practice is continued to the present day—thus, when the character of the alphabet is known, there is usually little difficulty in ascertaining the year in which any piece of plate marked with a letter was made. These alphabets, or cycles of twenty years, commenced in 1438, when the system, which was of foreign origin, seems to have been first introduced. The annual letters, and of course the alphabets, were always changed on the 29th of May, St. Dunstan's Day, when the new warden of the Goldsmiths' Company was elected and delivered the new punches to the Assay Master, so that each letter indicates the period between the 29th May in one year to the same day in the year succeeding, in fact a portion of two civil years, which is sometimes an important fact, as it in many cases causes the date of an inscription to agree exactly with the date of the make.

The earliest known marked piece of English plate is the celebrated spoon of Henry VI., now preserved at Hornby Castle, in Westmoreland, and it bears the Lombardic letter h, showing that it must have been made in the period between the 29th of May 1445 and 29th May 1446. The first alphabet, ranging from 1438 to 1458, was, as has been said, Lombardic, for which that spoon is the authority. Of the second alphabet, from 1458 to 1478, I have found no instance, and know not what was the character: from 1478 to 1498 the character was again Lombardic, but with the peculiarity that the letters were cusped both outwards and inwards; and the next alphabet was black letter minuscule. The

annual letter on the chalice and paten is a Lombardic B, of which the bows or loops rather appear to be cusped outwards, but being minute there is some difficulty in pronouncing with certainty (see *b*, Plate XXI.) This letter can, however, only indicate one of three years—1439, 1459, or 1479. The form of the cup and the enamel work point, I think, to a date earlier than 1479, and I am therefore disposed to fix its date at 1459, though it might possibly be twenty years earlier, viz., 1439. In either case its interest is great, as, if of the later date, it will tend to fix the character of the wanting alphabet, and will be the second earliest piece of known English plate, or if it should be of the previous cycle it will then rank as the earliest extant example of English goldsmith's work.

We now come to the history of these ancient pieces of church plate. The church of Nettlecombe stands close by Nettlecombe Court, the ancient ancestral seat of Sir Walter Calverley Trevelyan, Bart. F.S.A., whose forefathers have for centuries dwelt there. To him and to the Rev. Hugh W. Jermyn, Rector of Nettlecombe, we are indebted for the exhibition of the chalice and paten. The Nettlecombe estates, according to Collinson, originally belonged to a family named de Raleigh, of which the last male heir, named Simon, succeeded his brother John in the possession of them. This Sir Simon Raleigh is stated to have been in Spain with the Duke of Lancaster, 10 Rich. II., 1387, and he must then have been of age. He was at Agincourt in 1415. Having vested some of his estates in trustees on condition that they should raise the sum of £10 a-year for the maintenance of a priest to perform divine service in the Chapel of St. John Baptist on the south side of the parish church at Nettlecombe, (and this service was continued, as we see by the churchwardens' accounts, to the time of the Reformation,) he died 12th March 1440, when he must have been at least seventy-five years old. On his death without issue his estates descended to his nephew Thomas Whalesborough, whose only daughter and heiress, Elizabeth, became the wife of Sir John Trevelyan, Knt., a member of an ancient and eminent Cornish family, whose descendants have ever since held the estates. Sir John Trevelyan probably came into possession about the middle of the fifteenth century, and it is by no means unlikely that he should have presented to the church the chalice and paten the date of whose make will well bear out the supposition. This is, however, simply a conjecture.

Previous to the Reformation the plate and other valuable utensils employed in the celebration of divine service were in no danger; but in the reign of Edward VI. the parishioners of Nettlecombe seem to have had some fears as to the safety of their chalice and other articles of value. The churchwardens' books and

accounts in that parish date back as early as 1507, and they have most fortunately been preserved. They contain many curious particulars; and certain entries—made, as I am told, not in a regular book but on loose sheets of paper—inform us especially of the manner in which they contrived to preserve their chalice and other valuable articles—for among the accounts are found the following documents or memoranda, of which the orthography is somewhat curious as well as uncertain :—

"Be yt knowyng unto all men that we pysners of Nyttylcoñ have delivered unto Master John Trevylyan Esquyer, on the xxvijth day of Januerye yn the yere of the Rayne of Kynge Edwarde the Syxte, the secunde yere of hys Rayne (1549), one challes w^{t} a paxe of sylver and a Pyxe of sylver gyltyde, and a Calopynne, w^{t} iij bells of sylver gyltyde w^{t}yn the same pyxe, at all tymes at ther nede to be had of the aforesaid Mast^{r} John Trevylyan Esquyre.—By me, John Trevelyan."

In another copy of the same, not signed, the description runs—"One challys w^{t} a paxe of Sylver gylted, one Callopynne, w^{t} iij byllys of sylver gyltyd w^{t}yn the same, at all tymes at ther nede to be had of the aforesayd Mast^{r} John Trevelyan Esqueare the yelder of Nettilcombe, nowe ther p̄sent."

In another note dated 21st December, 4th year of Edward VI. (1551) :—"M^{d}. That doth remayne yn the handdes of Mast^{r} John Trevelyan Esqueare, a Coddereng not used of the pysche, but to be delevered unto the pysche at al tymes to ther nedde and callyng for the sayed Codderenge."

The articles mentioned in this document as delivered to Master John Trevelyan are a chalice, a pax of silver gilt, a pyx of silver gilt, a calopynne of silver gilt with three bells either within it or within the pyx, and a "coddereng." The chalice is most probably that which we have seen. No mention is, however, made of a paten, but it is possible that the silver-gilt paten belonging to the chalice may have been called by the churchwarden, or other writer of the note in question, a pax; and, having the vernacle represented on it in enamel, may, in a small country place, have been used as a pax. This, however, is contrary to usage; and as no paten is mentioned in the document, though one clearly belonging to the chalice is preserved, and as although a pax has been mentioned none has been preserved, I think we may fairly conclude that the writer of the document has by mistake called the paten a pax.

By a pyx is usually understood a box or covered vessel to contain and keep the wafer-breads for the Holy Sacrament; but the term also means a box or casket, and if, as it here seems to be stated, the chalice, pax, calopynne with the three bells, were all or any of them to be contained within "the same pyx," this must

have been of large size, and could hardly have been only such a vessel as was used for the purpose of holding the wafer-breads.

The word "calopynne" had long puzzled me, and I have never been so fortunate as to meet with any one who could give me information on the subject, nor do I correctly understand whether the three silver-gilt bells were part of this object. In Dart's "History of Canterbury," however, I find in the list given of the church utensils belonging to the cathedral this phrase, "Item duo calepugni de cupro deaurato," which I take to mean two hand-warmers, from *caleo*, to be warm, and *pugnus*, a fist or closed hand. Such articles were used in the church for the purpose of keeping warm the hands of the celebrant priest, for fear of any awkward accident arising from the coldness of his fingers whilst handling the sacred elements and vessels. They were formed of a hollow ball of metal, to contain a heater of hot metal, glowing charcoal, or, possibly, a small lamp, supported in the middle on double gimbals, like a mariner's compass, so as to preserve it always in the same position, in the centre, whichever way the ball might be turned; the surface of the ball being pierced to let the warmth pass out, and admit air if necessary. Such an utensil is figured in the early editions of the Encyclopædia Britannica, and there called a "rolling lamp." These articles were in France called "pommes chauffrettes," or "pommes à chauffer les mains." Several instances of them are given in M. de Laborde's Glossary, appended to his Catalogue of the Enamels, &c., in the Louvre. One instance, taken from an inventory of the date of 1502, describes the object, and is quite in point—"Pomum (argenteum) forutum in plerisque locis, habens receptaculum etiam argenteum, in quo poni solet ferreum candens, ad calefaciendas manus sacerdotis in tempore Hyemali." I am therefore very much disposed to consider the mysterious word calopynne to be a corruption and mis-spelling of the word *calepugnus*.

The three bells may have been the sacring bell used to give notice of the elevation of the Host. They may have been separate bells or three small ones fixed in a semi-globular frame, such as now used by the acolytes in Roman Catholic places of worship on the continent, and probably also in this country, or it is possible that they may have been small globular bells fixed within the calopynne. This, however, is only a surmise.

In the last entry on the 21st December, 1550, 4th Edward VI. we find mention made of an article in the keeping of Master John Trevelyan, called a "coddereng." I am altogether at a loss to conjecture what this can be. It is doubtless the name of some well-known article intelligible in itself, but utterly disguised by

defective orthography, for the word occurs twice in the same sentence, and is differently spelt each time—indeed, throughout the whole of the churchwardens' accounts, the spelling is so strange and irregular that the same word is rarely written twice alike in the same sentence.

This "coddereng" in 1551 was left in the hands of Master John Trevelyan as "not used of the parish," and was therefore probably some article not necessarily employed in the performance of divine service.

By these entries in the accounts we learn that the chalice and other valuable articles of the church utensils were made over to or placed in the custody of Master John Trevelyan, on condition that they should be forthcoming when wanted for use by the parishioners, in anticipation as it were of the commissions which might and which actually did issue; for we find that in 1552 a commission was issued by King Edward VI. to the Marquis of Northampton and others for a survey of church plate, and the instructions to the Commissioners were, that they should "visit churches, chapels, fraternities, or guilds, and cause due inventories to be made of all goods, plate, jewels, and ornaments, and give good charge and order that the same goods should be at all times forthcoming, leaving nevertheless in every parish church or chapel one, two, or more chalices or cups, according to the multitude of the people in every church or chapel."

Burnet also informs us that shortly before the death of Edward VI. (in 1553), visitors were appointed "to examine what church plate, jewels, and other furniture was in cathedrals and churches; and because the King was resolved to have churches and chapels furnished with that which was comely and convenient for the administration of the Sacraments, they were to give one or more chalices of silver to every church, chapel, or cathedral, as their discretion should direct them, and to distribute comely furniture for the Communion-table, or for surplices, and to sell the rest of the linen and give it to the poor, and to sell copes and altar-cloths, and deliver all the rest of the plate and jewels to the King's treasurer."

When therefore any Commissioners or visitors came down, the church at Nettlecombe had no return to make. "*Nulla bona*" would be the simple reply, the articles in question being no longer their own, nor in their own keeping; and this ingenious arrangement could very easily be made, inasmuch as Master John Trevelyan was patron of the benefice, and the church was close adjoining to his ancient manor house; and to this manœuvre we are indebted for the preservation of these very interesting and beautiful articles.

The ancient chalices and patens which were in use before the Reformation are not of common occurrence, though in small rural parishes it is probable that

more may be found than we are aware of. But the olden chalices are fast disappearing, the clergymen and churchwardens frequently preferring the look of a large new chalice to the original smaller cups of earlier and more simple form; and I have frequently seen many of the earliest Protestant chalices of the time of Elizabeth in the windows of silversmiths' shops, sent up and sold or exchanged for the value of the metal, whereas the silversmiths have resold them to the curious in old plate at very high prices. I possess photographs of another chalice, similar to that described, which still exists, belonging to the parish of Combepyne, not far distant from Nettlecombe. It is not, however, in its original state, the stem having been altered by the removal of the knop, and the upper and lower portions of it joined by a modern band. There are small feet attached to each of the angles of the original hexagonal base, but I think from their style they can hardly be original; if they are, they indicate a late date. In February 1867[a] a chalice from West Drayton was exhibited to the Society, which seemed to have once had similar feet attached to it, but which had been removed. The bowl had a projecting lip and was bell-mouthed, which shows a very late date, and the hall-mark indicates the beginning of the sixteenth century, but of the precise year I have no note.

Before closing this paper it may be as well to say a few words on ancient chalices: First, as to the material; and, secondly, as to the form. Various substances have been used for the bowls of chalices, such as glass, crystal, agate, or other precious stones, but these substances were at an early period forbidden to be used, as liable to get broken by reason of their brittleness. Horn was forbidden as a material for chalices on account of its being an animal substance and therefore formed by blood, and wood on account of its porous nature as absorbing the wine and not easily cleaned, and only gold and silver were ordered to be employed, though tin and pewter were allowable in very poor places. In cases where the other part of the chalice is of inferior metal the bowl is always of silver. The only chalice which I know of, of which the bowl is not of metal, is the famous chalice in the sacristy of the cathedral of Monza, of which the bowl is formed of a large block of sapphire—or at least said to be so. It is now very many years since I have seen it, but, as far as my recollection goes, it is of much too dark a colour to be a real sapphire, and looks more like a piece of ancient dark-blue glass; and this is more likely, as the true sapphire is never found in such large crystals or masses, and it must have been a prodigious mass to have

[a] See *Proc. Soc. Antiq.* 2 S. iii. 447.

made this cup, to say nothing of the extreme difficulty of hollowing out so hard a material, the hardest substance in nature next to the diamond, and I cannot help thinking that a mistake has been made between the words *zaffiro*, the precious stone, and *zaffera*, the zaffir of commerce—a dark blue vitreous substance made of powdered flints and the oxyde of cobalt, which gives it its colour.

Now, as to the form: A chalice consists of three parts—the cup or bowl; the stem, which in its middle swelled into a bulb, called the knop; and the foot. The bowl itself was usually quite plain, in order that it might be more easily kept pure and clean. It was, however, occasionally mounted in an exterior cup or socket adorned with various ornamentations, which came about halfway up its entire height. The stem, knop, and foot were frequently ornamented with enamels, engravings, or chased work representing the emblems of the Passion or other sacred subjects; and on the foot, which was usually made hexagonal, to prevent the chalice from rolling, there was always a cross, which the priest kept towards himself at the time of celebration.

In the early days, when the Holy Sacrament was administered to the congregation in both kinds, the chalices appear to have been large two-handled bowls with a foot only; there was no need of a stem or knop, as the chalice was not to be grasped, but was presented to the mouths of the recipients by the priest, who held it by the two handles. A most remarkable and beautiful instance of such a chalice was found at Ardagh, in the county of Limerick, early in the present year, and exhibited by the Earl of Dunraven, both here in London, and, in the autumn, at the meeting of the Cambrian Archæological Association. The date of the ninth century has been attributed to it. These chalices are very rare, if this is not an unique example. It is most exquisitely ornamented all over, and especially underneath the foot, which part, when the chalice was presented by the priest to the recipient by the two handles, would be exposed to view.

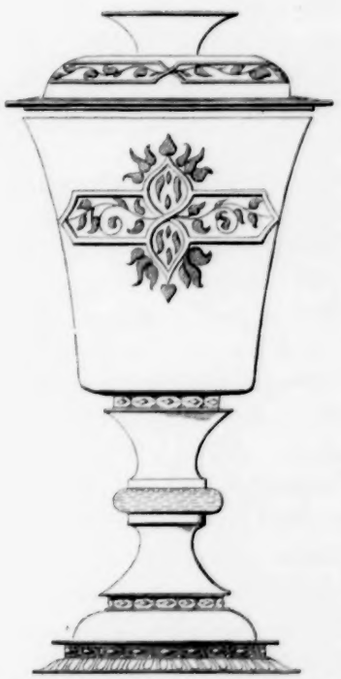
In the thirteenth century the chalices seem to have been short and low and the bowl wide and shallow, as exemplified by the celebrated chalice of St. Rémy, once at Rheims and now in the Bibliothèque Impériale, which is considered to be of the time of St. Louis, as also by the chalices of silver and pewter which have been found in the tombs of priests of that century.

In the fourteenth century they were made taller, the bowls assumed a decidedly conical form, being narrow at the bottom, and having the sides sloping straight outwards. In the fifteenth century they were usually made broader at the bottom with the sides still forming part of a cone, like that at Nettlecombe, till a form altogether hemispherical was assumed, of which the fine chalice of Leominster,

figured in the Archæologia, vol. xxxv. p. 489, is a noble specimen. Of this type also is the chalice of Combepyne. This form afterwards changed to a bell-mouthed shape, with a projecting lip, like that of West Drayton, which brings us down to the sixteenth century.

On the establishment of the Protestant religion in England in 1558, by statute 1st Elizabeth, a new form of chalice was introduced for the use of the communicants of the Church of England, who, receiving the Sacrament in both kinds, required a larger cup. I have been unable to discover any authority or direction for the formation of these chalices, but the same form and the same ornamentation were introduced and adopted from one end of the kingdom to the other whenever new chalices were made, and they are to be found in every part of the country. The chalice still consisted of the same parts, bowl, stem, and foot, though I have known two instances in small parishes where the chalices consist of the cup only, without stem or foot. The stem, although altered in form and character, still swells out in the middle into a small knop, or the rudiments of one, and is occasionally ornamented with small bands of a lozenge-shaped ornament, or some other such simple pattern, and the foot is invariably round, instead of indented or angular. The form of the cup, however, is altogether changed, and, instead of being a shallow wide bowl, it is elongated into the form of an inverted truncated cone, slightly bell-shaped. The form of the paten is also much changed; the sunk part of the platter is often considerably deepened, the brim narrowed, and thereon is fixed a rim or edge, by which it is made, when inverted, to fit on the cup as a cover, whilst a foot is added to it, which serves also as a handle to the cover, as though it were intended to place the wine in the chalice and cover it with the paten cover, until the administration of the Sacrament, when the cover would be removed and used as a paten for holding the bread. On the bottom of the foot of the paten was a silver plate which almost always bears the date when it was made, and the name of the parish to which it belongs. The ornaments on all these chalices and paten covers, as they may be called, is invariably the same; it consists simply of an engraved band round the body of the cup and on the top of the cover, formed by two narrow fillets, which interlace or cross each other with a particular curvature, in every instance the same, the space between them being occupied by a scroll of foliage, and this ornament is marked by a total absence of letters, monograms, emblems, or figures of any kind. It is very curious how this exact uniformity of shape and ornament was so universally adopted, unless there had been some regulation or standard pattern to go by, but I have not been able to find any





such to guide the makers. I may mention a few good instances which I know of, amongst many others which I have seen. They are not uncommon in Monmouthshire and Herefordshire, but at Christchurch is one so perfect and in such good condition that it has been engraved in the Archæological Journal.[a] At both Old and New Alresford, in Hampshire, are very good examples, and at Rodney Stoke, Mark, and Meare, in Somersetshire, there are also very fine chalices and patens of this kind, that at Mark being gilt; the dates of these range between 1560 and 1580, the hall marks agreeing with the engraved dates. This form of chalice was continued in many instances down to the Commonwealth, though the engraved ornaments were omitted. Sometimes they were of very large size, of which the chalices at St. James's church, Dover, are examples, especially the larger one, which will hold more than a quart. The history related of it is that it was given by the Earl of Northampton, Constable of the Castle, to the garrison church of the fortress, and when that fell to ruin it was sent down to St. James's, the parish church. On the bottom of the foot of the paten are engraved his arms, which seemed to confirm the history; but the annual letter indicated that the plate was made in 1632, and the Earl of Northampton died in 1614. Here was a discrepancy in the evidence of the article itself, the evidence of the engraved coat of arms being at variance with the annual letter, which I knew must be right. I put myself in communication with Mr. Albert Way, and on further examination it appeared that on the assassination of the Duke of Buckingham, in 1629, Theophilus Howard of Walden, second Earl of Suffolk, became Constable, and died in

[a] *Arch. Journ.* ix. 290, whence the cut in the text is, with permission, reproduced.

1640, and the arms which he bore were the same as those borne by the Earl of Northampton; thus the arms and the date of the make of the plate both coincided, and it was clear that owing to the similarity of the arms a mistake had been made by the narrator of the history, and the liberal gift had been attributed to the wrong person, the Earl of Suffolk being in fact the real donor. The ancient church at the castle has, I think, been rebuilt or refitted of late years, and I hope the ancient chalice has been restored to it. Since the Restoration chalices and church plate, both here and elsewhere, have been made according to the prevailing taste and fashion of the day; and, though there is no peculiar distinctive character, any one experienced in such matters will generally be able to make an approximate guess at the period when any article was made, as well as by the examination of the hall-mark, which is the only certain and exact test.

XXI.—*Researches and Excavations carried on in an ancient Cemetery at Frilford, near Abingdon, Berks, in the years* 1867-1868. *By* GEORGE ROLLESTON, *Esq. M.D. F.R.S. Linacre Professor of Anatomy and Physiology in the University of Oxford.*

Read January 23rd and May 14th, 1868.

THE paper which I have the honour of laying before the Society of Antiquaries was drawn up by me at the suggestion of J. Y. Akerman, Esq. F.S.A. and in the hope that it might serve as a continuation of his "Report of Excavations in an ancient Cemetery at Frilford, near Abingdon, Berks," which may be found in the Society's Proceedings for May 25, 1865.

During the years 1867 and 1868, I have, from time to time, by the kindness of William Aldworth, Esq. the owner of the soil, been allowed not only to watch such quarrying operations as have been carried on upon the site of this cemetery, but also to conduct some excavations there independently of that work. The results of my observations I have arranged under two heads. First, I have given an account of the objects and discoveries of a purely archæological character; and, secondly, I have specified the various conclusions to which my examinations of the very extensive series of human remains have seemed to me to point more or less doubtfully. Appended to this paper will be found, first, a detailed catalogue of all the very numerous objects, both of archæological and of anatomical interest, which the liberality of Mr. Aldworth has transferred to the University Museum; secondly, a tabular catalogue, giving in one view the number, the age, the stature, and the nationalities of the human remains; and thirdly, a *catalogue raisonnée* which presents a similar *coup d'œil* of the different objects of cardinal importance, which have served as fixed points for my various identifications.

Mr. Akerman's investigations had, as may be seen by referring to his paper already cited, led him to the conclusion that Roman or Romano-British and Anglo-Saxon interments were both alike to be found in the Frilford Cemetery, but that the majority of them belonged to the latter of the two nationalities. I

have, however, by the discovery of Anglo-Saxon cinerary urns placed superficially to the relicless graves of which Mr. Akerman speaks, been compelled to refer these inhumations to a period anterior to that of Pagan Saxondom, and to differ herein from the instructor from whom I have learned and to whom I owe so much. It is upon this discovery of Anglo-Saxon cremation urns, containing half-calcined human bones, and holding when discovered, relatively to relicless or all but relicless skeletons found in the ground below them, a position from 15 to 18 inches nearer the surface, that I rest almost the only conclusion to which I have ventured to come in opposition to Mr. Akerman's views. But it is hoped that a record of the somewhat extensive series of observations made in this cemetery during the last two years may serve to cast some light upon certain moot points upon which Mr. Akerman's investigations did not give him an opportunity of remarking.

The cemetery is situated in the angle intercepted between the left bank of the river Ock and the road leading from Frilford to Wantage. Frilford "Field" is now brought under cultivation, but the tradition that this portion of it is haunted still survives in the recollections of the rustics, one of whom informed me that, though he had never seen them there himself, ghosts were supposed to be particularly likely to be seen at a single thorn-bush[a] which stood, some time back, close to the site of these graves. Great numbers of Roman coins have been and still are found by labourers engaged in ordinary agricultural work all round this spot; and fragments of very many varieties of Roman pottery are equally accessible, though, of course, much more abundant, on and in the superficial layers of the now cultivated fields. There is much other evidence to show that Roman civilization had taken firm root in this locality, and some of this evidence will appear in the course of my account of the excavations in the cemetery. But two excavations which we made in two spots, about a couple of hundred yards distant from the cemetery, gave us a more vivid idea of the wealth and civilization of the Roman

[a] The growth of this thorn-bush may have been accidental here, but we know that thorns were purposely planted on tumuli. (See Jacob Grimm, *Verbrennen der Leichen*, Berlin Abhandl. 1849, pp. 203, 209, 242, 244; Nillson, *cit. in loc.*; Max Müller, *Zeitschrift Deutsch. Gesellsch. Morgenland*, ix. 11. Theocritus, Idyll xxiv. 87; where Wüstemann remarks in his commentary, "Omnibus spinarum generibus vim noxarum depellendarum inesse existimabant veteres." See also *Horæ Ferales*, p. 69). The neighbouring tumulus known as "Barrow Hill" is beset with thorn-bushes at the present day; and the British barrow of Dinnington, in South Yorkshire, on the estate of J. C. Athorpe, Esq. was similarly clothed. The thorn may have belonged to the "*certis lignis*" used, according to Tacitus, *Germania*, xxvii. in the cremation of chiefs.

or Romano-British inhabitants of the place, which their Saxon conquerors named Frilford, than anything which we found in the burial ground, which both races successively occupied. Mr. Aldworth had observed the greater greenness and strength of the crops upon these two patches of ground; and by his suggestion I dug into them with the result of finding,[a] for a depth of ten feet or more, an aggregation of fragments of pottery of the most varied patterns and degrees of fineness mixed up with similarly fragmentary bones of the ox, sheep, pig, and dog, and with other articles, such as knives and coins, which, like the bones and shards specified, would be expected in the rubbish-heap of a great house. The site of this great house I have not found; but I strongly suspect that the quarry, whence the stones for its construction were taken, was employed for, and is now represented by, one or other, or both of those pits of rubbish. This short history illustrates the truth of a remark recently made by the Hon. W. O. Stanley[b] as to the imperfection of "the investigation of sites and of dwellings in the early times;" but time and opportunity may enable me to supply this deficiency. In the meantime, the discovery in the cemetery of four interments in leaden coffins, and after the Roman fashion, so fully described by the Abbé Cochet,[c] furnishes additional evidence as to the character of the civilization existing here in the times of the Later Empire, which the excavation of hypocausts and tessellated pavements might confirm, but cannot be thought necessary to complete.

Four other kinds of interment, one Romano-British and three Anglo-Saxon, have been observed and described in the following account of the excavations at Frilford. The Romano-British interments differ from those just mentioned merely in being of less expensive character; they constitute the greater part of all the interments I have examined at Frilford, and that they are Romano-British is, to omit for the present other evidence, proved by the fact that superficially to them in the soil I have found Anglo-Saxon urns containing burnt human bones, and belonging, therefore, to the first periods of Anglo-Saxondom in England. About half of the Anglo-Saxon interments discovered here were interments in the way of cremation; and of the various patterns of the urns several figures will be found in the plates illustrating this paper. The other half are cases of inhumation with the well-known Anglo-Saxon relics, and, in adopting inhumation, the Anglo-Saxons either dug shallow graves without regard to the points of the compass, independently of, though often superficially to, those of their conquered predecessors; or, secondly, they dug deeper graves pointing to or towards the East,

[a] See Catalogue, *infra*, Sept. 24, 1868.

[b] *Ancient Interments and Sepulchral Urns in Anglesea*, p. 19.

[c] *Normandie Souterraine*, pp. 29, 30.

following thus Christian precedent both as to depth and as to direction, but diverging from the practice of the Romano-Britons in setting stones round the graves instead of protecting the body in a wooden or other coffin; and whilst doing this, they sometimes—all supposed scruples as to secondary interments[a] notwithstanding—displaced one body, probably that of one of their predecessors, to make room for the corpse they were interring with the same orientation. I say it is probable that where an Anglo-Saxon skeleton is found to have displaced another set of remains, the primary interment was a Romano-British one, because I think it improbable that the half-heathen custom of interring with insignia should have been combined for a sufficiently long time with the Christian method of deep and oriented interment to allow of one body thus interred being sufficiently forgotten to be safely displaced. Burial with insignia was early discontinued by Christianised populations, except in the cases of distinguished personages ecclesiastical and temporal,[b] and the Anglo-Saxons I have exhumed do not appear by their insignia to have belonged to either of these classes.

In all the inhumations which I have examined at Frilford, the bodies had been extended at full length, and in the cases of Romano-British burials more or less oriented. The fact that the deviation from orientation is usually towards the south may seem to indicate that the majority of deaths took place then, as now, in the winter-quarters of the year, when the point in the horizon at which the sun would rise would be south of east.[c]

I. *Of the Roman Interments in Leaden Coffins discovered at Frilford.*

By a reference to Mr. Akerman's paper already quoted, it may be seen that two leaden coffins, each of which contained a skeleton, and one of which contained a coin of Constantine the Great also, were found in the Frilford cemetery in the autumn of 1864. The commencement of my researches in this cemetery dates from the discovery in it of a third and fourth coffin of similar character and

[a] The Abbé Cochet in the first edition of his *Normandie Souterraine*, p. 185, had stated that "l'usage d'enterrer plusieurs fois aux même endroit est éminemment moderne;" but in the second edition of that work, pp. 209, 432, 436, and also in the *Tombeau de Childeric*, p. 55, he has receded from this untenable position. Grimm, towards the conclusion of his paper, *Ueber das Verbrennen der Leichen, ubi supra*, p. 269, quotes the words of Sidonius Apollinaris, "Jam niger cæspes ex viridi, jam supra antiquum sepulchrum glebæ recentes," to show that the practice was only too well known to the Christians of the later Roman Empire. See also Friedr. Simony, "*Die Alterthümer Halstatter Salzberg*," Wien, 1851.

[b] See *Capitularia Regum Francorum*, ii. 852.

[c] Cf. Abbé Cochet, *Normandie Souterraine*, ed. i. pp. 192, 193, 255, 265.

contents to these, in the month of January, 1867. These interments were near to each other, ten feet only intervening between the foot of the one and the head of the other grave. The direction of the graves was 45° south of east, which, when corrected for the magnetic variation, would give E.S.E. as the true bearing. The coffins were at a depth of about five feet below the present surface of the soil, and this greater depth, as well as their greater intrinsic costliness, would seem to show that their tenants had been persons of greater wealth and consideration than the occupants of the similarly oriented graves of which we shall have to speak next. The length of the coffins is 6 feet 4 inches, and their breadth 1 foot 6 inches. Both of the coffins have undergone much mechanical change in the way of contortion and crushing, and they contrast herein to disadvantage with certain coffins of the same period in the British Museum, and in the Museum of Antiquities at York, which still retain the form which was conferred upon them at their manufacture.[a] The Frilford coffins have also undergone much chemical change, the metallic lead having been changed both on their exterior and throughout their substance into the red oxide and carbonate, whereby they have suffered great loss of plasticity and flexibility. Each of them possessed a lid, which appears to have been simply laid upon the top of the rectangular coffin proper without any soldering. Large nails with square heads were found in relation with the coffin, and as woody fibre, shown by microscopic examination to be probably oaken, is still plainly enough to be detected upon the urn, even with the naked eye, it would seem that the leaden coffin had been surrounded by a wooden one.[b] An analysis of the substance of these coffins, which I owe to the kindness of Heathcote Wyndham, Esq., M.A., Fellow of Merton College, shows that it contains 3·28 per cent. of tin, and that the coffins resemble in this, as in other particulars, those described by the Abbé Cochet in his *Normandie Souter-*

[a] The leaden coffins to be seen in the British Museum were dug up in Camden Gardens, Bethnal Green, in the excavations for the new Docks at Shadwell, and in Whitechapel. For the coffins in the York Museum, see Professor Phillips' *Yorkshire*, p. 247, and *Descriptive Catalogue of Antiquities* in York Museum, by the Rev. C. Wellbeloved, p. 77, and his *Eburacum*, p. 112.

[b] This conclusion rises to certainty almost when we read the account given by Ralph Thoresby, *Phil. Trans.* 1705, No. 296, p. 1864, of the excavation of a coffin, "probably interred 1500 years ago," which was seven feet long, and was "inclosed in a prodigious strong one made of oak planks, about two inches and a half thick, which, beside the riveting, were tacked together with brags and great iron nails . . . . they are four inches long, the head not diewise, as the large nails now are, but perfectly flat and an inch broad." The length of the Frilford nails is four and a half inches, and the breadth of their heads one inch and a quarter. See also L'Abbé Cochet, *Normandie Souterraine*, ed. i. p. 30; *Archæologia*, vii. 376, 381. Bloxam's *Fragmenta Sepulchralia*, p. 39.

raine, pp. 28-31, as characteristic of the Gallo-Roman period in France. In each of these coffins was found the skeleton of a strong man, who was at the time of his death considerably past the middle period of life. Of the anatomical characters of these skeletons I shall have to speak in detail later; it is sufficient to say here that they show that the individuals to whom these bones belonged were strong men, in the possession of the means for culture and comfort which those days could afford, but who had also suffered much from the physical and other inclemencies which we know to be the natural incidents of the life of the soldier. In one of these coffins five coins were found, of which one was a coin of Constantine the Younger, another of Valens, and a third, which, like the first, was a third-brass specimen, was a coin of Gratian. By means of this last coin we are enabled to say that this interment took place, in all probability, within the short but eventful period which elapsed between the accession of Gratian and the evacuation of Britain by the Legions, inasmuch as the departure of the Romans may be reasonably supposed to have entailed the collapse of the civilization and customs which they had introduced and supported.[a]

II. *Of the Roman or Romano-British Interments without leaden, but in most cases, probably, with wooden coffins, and in semi-oriented graves.*

The second and most numerous class of interments that we meet with in this cemetery are found occupying parallel, or nearly parallel, rows of trenches, running, to speak generally, from a point more or less north of west to one more or less south of east, and containing, very commonly, besides the skeletons, bones and teeth of domestic animals (though not in the great abundance noted in other Romano-British cemeteries), fragments of charcoal, oyster-shells, shards, flints, and nails, with woody fibre adhering to them. In some of these graves coins were discovered, in addition to the other objects just specified. Now, we are not justified by the presence of any, nor, indeed, by the presence of all, of these peculiarities, in concluding that any interment is Roman or Romano-British, the imitative[b] tendencies of the Teutonic races having led

[a] For a note of a discovery of leaden coffins in the neighbourhood of other Roman remains, see Schaafhausen, *Die Germanische Grabstätten am Rhein*, 1868, p. 131.

[b] For the imitative tendencies of the Teutonic races generally, see Coote's *Neglected Fact in English History*, p. 44; Worsaae's *Primeval Antiquities of Denmark*, Eng. Trans. 1849, p. 140; Engelhardt, *Denmark in the Iron Age*, Preface, p. viii.; Von Sacken, *Leitfaden zur Kunde des Heidnischen Alterthums*, p. 158; Wylie's *Fairford Graves*, p. 30; Merivale's *Conversion of the Northern Nations*, p. 92; Roach Smith, *British Assoc. Report for* 1855, p. 145. For the presence of bones of animals and their teeth in Anglo-



ANTIQUITIES FROM AN ANCIENT CEMETERY AT FRILFORD. (1)

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them somewhat slavishly into copying the customs of the world they subdued, even in points relating to such matters as the burial of the dead. Each and all of the objects have been found all but indifferently in both Anglo-Saxon and Romano-British, in Frankish, and in Gallo-Roman graves. I was first convinced that these interments, more than fifty of which have been under examination at Frilford since I first became acquainted with the cemetery, contained the remains of Romano-Britons, and not of Anglo-Saxons, by the discovery of the unmistakeable Anglo-Saxon urn, figured Pl. XXIII. fig. 1, about fifteen inches above a skeleton occupying one of these graves (No. vi. Sept. 1867). Two other skeletons, one of an old woman interred with three coins (No. iv. Jan. 9, 1868), and one of an old man (No. iii. April 1, 1868) were found subsequently occupying the same position relatively to similar Anglo-Saxon urns containing similarly burnt human bones. It is possible, however, to object to this apparently satisfactory argument; first, that the deeper-lying body may have belonged to a Christianised, and the cremation urn to an apostate, Anglo-Saxon's burial; or, secondly, that the cremation urn belonged to an Anglo-Saxon funeral which took place in the heathen pre-Augustinian period, but that it was carefully replaced, after having been disturbed, to make room for one of the same race who had died after the evangelization of Berkshire by Birinus. Both these objections—the former suggested to me by Mr. Akerman, and the latter by the reading of Mr. Roach Smith's letter in the *British Association's Report for* 1855, p. 145,[a] are, however, fully met by the discovery, on four different occasions, of Anglo-Saxon skeletons, verifiable as such by their insignia, and with no constant relation to the points of the compass, in the same relative position to these interments as that already described as being held by the cremation urns. (See *infra* Catalogue, No. xviii. February 8, 1868; No. ix. September 25, 1868, *infra*.) It is possible, though not probable, that an urn, even of the fragility and elegance of those figured, may have been replaced in its entirety, heavily laden though it was with its contents; but it is impossible to conceive that a similar pious painstaking can have laid out a disturbed skeleton a second time in the full and due proportions of the unarticulated bones possessed by

Saxon graves, see Wylie, *l.c.* p. 24; Akerman, *Pagan Saxondom*, Introd. p. xvii. For that of charcoal, Wylie, *l.c.* p. 29; Akerman, *Further Researches at Long Wittenham, Archæologia*, vol. xxxix. For that of shards and flints, Douglas' *Nenia Britannica*, pp. 10 and 34; Wylie and Akerman, *ll.cc.* For that of the *Portorium*, Lindenschmit, *Archiv für Anthrop.* ii. 3, 1868, in review of Wanner's work, and in his own work, *Die Germanische Todtenlager beim Selzen*, p. 51; Von Sacken, *l. c.* p. 154; Akerman, *Proc. Soc. Antiq.* 2 S. iii. 165. See also Abbé Cochet, *Tombeau de Childeric*, passim, and *Normandie Souterr.* p. 31.

[a] See also *Inventorium Sepulchrale*, Introd. p. xvi. and p. 8.

the skeletons found lying superficially to the "grave-row" interments of which I am speaking as Roman or Romano-British. The variation in the direction of the two bodies lying one above the other, the deeper being always the oriented one, excludes, of course, the possibility of their having been interred at the same time, as after a battle bodies are buried one above another in trenches. The funeral feast, and the visit to the burial-place of a beloved relative, will account sufficiently for the presence of the teeth and bones of the domestic ruminants, and the pig, in these graves. In the Romano-British cemetery at Helmingham in Suffolk, which I had an opportunity of examining through the kindness of the Rev. George Cardew, relics of this kind were more abundant than I have found them to be in the Frilford cemetery. Oyster-shells were found in considerable abundance in both these cemeteries, as the other indications of Roman occupation would have led us, *à priori*, to expect. I may perhaps here say, that it does not seem clear to me that any great probability attaches to an argument for the heathen character of an interment from the discovery there of such evidences of a funeral feast as the bones of domestic animals. The instinct so beautifully alluded to by Wordsworth, in his well-known poem "We are Seven," has in itself nothing repugnant to the spirit of Christianity, though the actual practice at the grave-side may and often did degenerate from that of the "little Cottage Girl"

> Who took her little porringer
> And ate her supper there.

Scandal arose out of the abuse of the funeral feast; but, inasmuch as the Church in all ages has acquiesced in the retention by newly-made converts of customs which, though heathen in origin, may not have been intrinsically immoral, it is easy to understand how a custom intrinsically laudable may have been tolerated when kept within due limits. As to the actual practice being rife amongst Christians[a] the numerous denunciations and inhibitions issued relating to it afford very abundant evidence.

[a] The following passages may be cited in addition to those so often referred to from the *Capitularies of Charlemagne*. In the collection of the Canons of the Greek Synods, by Martin Bishop of Braga in Portugal, who died in 580, we find the following words, "Non oportet, non liceat Christianis prandia ad defunctorum sepulchra deferre et sacrificari mortuis." See the *Corpus Juris Canonici*, where the passage is adopted as the text of Decretum Gratiani, De Consecr. dist. i. cap. 29, § 2, under the title *Ex Concilio Martini Papæ*. Hardouin, *Acta Conciliorum*, &c. 1611, iii. 390, has printed Martin of Braga's Collection, and, according to the margin of his edition, this particular canon comes from the third council of Arles, and not from a Greek source. See also Gretzer, *De Funere Christiano*, to which work I owe the foregoing quotation, lib. iii. pp. 159, 164, 166, ed. 1611, where Ambrose, Augustine, Cyprian,

A few bones of the dog and some teeth of the horse were found in some of the interments, but not in such numbers or positions as to make it at all probable that the former were the relics of a favourite animal interred with its master, or that the latter were remains which, in like manner, had been buried from similar, or from superstitious notions, or which had been the leavings of the practice of eating horseflesh which we know existed in those days in spite of the efforts of the Christian priests.[a]

Fragments of carbonaceous matter are to be found in Romano-British as also in Anglo-Saxon and undoubtedly Pagan interments. It is a little hazardous to pronounce quite positively as to a piece of black woody tissue that it was put into the grave as charcoal; and that its blackness is not due to the "eremacausis," which it has been exposed to for so many hundreds of years. If, however, such matter be in masses of considerable size, which possess on fracture the peculiar lustre of charcoal, and if it have not been impregnated with any salt of iron or other mineral so as to have been preserved by such impregnation from the decay which would otherwise have befallen it, we are justified in considering it exceedingly probable that it was put into the grave in the condition either of yet burn-

Gaudentius, and Faustus the Manichee, may all be found deposing to the fact of the funeral feast being abused by the Christians into an occasion of great licence. I do not happen to have met with any evidence to show that food or drink was put into the graves of the *early* Christians from any influence which any pre-Christian belief may have had upon them as to its possibly being of some use to the departed in the new world. This superstition was of course operative in the case of heathens, and amongst certain of the Scandinavian races (see Lubbock's *Prehistoric Times*, p. 89) it has lasted even down to our own times. Weinhold tells us (*Altnordisches Leben*, p. 493) that the tobacco-pipe, pocket-knife, and filled brandy flask were placed in Swedish graves (it is to be supposed only in remote districts), if not up to the present time, at all events up to the beginning of the present generation. Heathen customs, however, and customs as markedly heathen as cremation, retained their vitality to a very late period in the Baltic regions. (See for this *Grimm, loc. cit.*; Wylie, *Archæologia*, xxxvii. 467; and Lindenschmit, *Alterth. heidnisch. Vorzeit*, heft ii. bd. ii. *ad* taf. vi., for long persistence of heathen customs amongst the Alemanni. See also Wylie, *Graves of Alemanni*.)

[a] For the interment of favourite animals with their masters, see Von Sacken, *Heidnisches Alterthum*, 1865, p. 155; Weinhold, *Sitzungsberichte Phil. Hist. Klass. Akad. Wien*, bd. 29, p. 203, 1859. The bones of a large dog were found at Long Wittenham in a Romano-British interment so near to certain human remains as to make it seem possible that the animal had been purposely so placed. For the burial of the horse (*Das Trauer-Pferd*) in Teutonic graves, and those of other races, see Keysler, *Antiq. Select.*, 1720, p. 168; Wylie, *Graves of the Alemanni; Archæologia*, vol. xxxvi. *ibique citata*; Cochet, *Normandie Souterraine*, p. 298. For the suspension of the skull of the horse over graves, see *Pagan Saxondom*, p. 23. For the practice of eating horse-flesh, see *Confessional of Archbishop Ecgbert*, c. 38; the Decrees of Council held A.D. 785, under the presidency of Gregory, Bishop of Ostia; and *Penitential of Theodore*, c. xxx. s. 17. See also Lubbock, *Prehistoric Times*, p. 115, and Keysler, *l. c.* p. 322, 340. Pearson, *History of England*, i. 138.

ing embers, or of charcoal. The test mentioned by the Abbé Cochet, ***Normandie Souterraine***, p. 198 ed. i. (p. 229 ed. ii.), for differentiating charcoal from decayed wood, viz. that the latter gives a sherry colour on boiling with potash, is a little unsatisfactory, inasmuch as the purest charcoal would give a similar reaction after being surcharged and sopped through and through for ages with water, more or less laden, *ex hypothesi*, with impurities. Without losing sight of the possibility that blackened woody matter may be the remnants of a coffin, it is well to consider the different explanations which may be given of the presence of true charcoal in an interment. Four such have been given, two of which refer the practice to the operation of Christian beliefs; the third refers it to the working of feelings which are neither distinctly Christian nor yet distinctly heathen; whilst the fourth explanation is applicable to heathen interments only. The two first explanations may be expressed in two separate utterances of Durandus, the first being the often quoted one, vii. c. 35, as to the placing of embers and incense, *prunæ cum thure*, in the grave; and the second, a few lines further on, speaking of a Christian practice of placing charcoal in the grave to serve there as an imperishable protest against using the soil of the grave thereafter for secular purposes, "in testimonium quod terra illa in communes usus amplius redigi non potest; plus enim durat carbo sub terra quam aliud." The third of the four explanations refers the presence of charcoal in the graves to the holding of feasts by their side in replacement of the pagan sacrifices of former times. The fourth explanation refers us to the overt and recognized performance, or to the stealthy continuance of the eminently heathen practice of burning the body or of lighting a fire in the grave to prepare it for the reception of the corpse. Any one or all of the three first explanations are admissible in the case of the Romano-Britons; the fourth may very probably apply to the interments of the half-converted or apostatising Anglo-Saxons, to whose history we shall return.[a]

We are, from our recollections of the classical allusions to the *naulus* or *portorium*, strongly tempted to think that the placing of coins upon the corpse must have been a distinctively heathen practice. A curious passage which I came upon in Martene's great work (*De antiquis ecclesiæ ritibus*, ii. 374) has caused

[a] For the discovery of carbonaceous matter in graves, see Cochet, *Normandie Souterraine*, ed. i. pp. 198, 255, 256, 304; Kemble, *Horæ Ferales*, pp. 98, 104; Wylie, *Fairford Graves*, p. 29; *Graves of Alemanni*, p. 13; Schaafhausen, *Germanische Grabstätten am Rhein*, 1868, p. 104; Walder, *Anzeiger für Schweiz. Alterthum*, March 1869, p. 32. For the discovery of fragments of charcoal scattered throughout the entire mass of heathen tumuli, see Keller, *Mittheilungen der Antiquarischen Gesellschaft in Zürich*, bd. iii. p. 66. For the use of charcoal as being imperishable see Augustine, *De Civ. Dei*, xxi. 4.

me to attach importance to the fact that, in two of the interments I have examined here, the number of the coins interred was five. One of these interments was the first of the two in leaden coffins described already, and the other was an interment of the class of which I am now writing, and will be found in the appended catalogue under the number xxiv. of Feb. 21, 1868. Martene's words are, "Addit anonymus Turonensis:—Quidam sortilegi contra fidem agentes ponunt *quinque solidos* super pectus mortui, et in hoc imitantur morem gentilium qui in ore mortui ponebant denarium 'ut habeat quem porrigat ore trientem.'" I am not aware of any explanation having been offered for the selection of *five* as the number of the coins which the *gentiles*, or those who imitated them, placed in the grave. But such a passage as the one just quoted does not, even when taken by itself, justify us in considering an interment with coins to have been always an interment without the rites of the Christian church. Many persons act *contra fidem* and *imitantur morem gentilium*, whom, for historical purposes at least, we must consider to be Christians. As probably in the case of placing of charcoal in the grave, so, certainly, in that of the placing of coins there, the Church exercised a wise toleration, protesting, it may be, more or less directly, by the introduction of such sentences as those which our burial service contains, against the thought that we can take anything with us out of the world, but acquiescing in the actual repetition and continuance of the custom. Just as the custom of placing earthen vessels in tombs has survived down almost to our own time in remote districts such as La Bresse and Morvan in France (see Cochet, *Archéologie Céramique*, p. 1, 1860), so that of placing coins on the mouth and chest of the corpse is persisted even to the present day in parts of the country similarly remote from the great centres of life. The fact, however, that money to the amount of no less than three hundred pieces of Roman coinage was placed in the tomb of Childeric is more conclusive than any mere speculation from the analogies furnished by ancient or modern times. A kindly instinct induced persons, who probably enough had never heard of Charon, to bury with their deceased friend or relative that which they knew him or her to have valued most, and the presence of coin in a grave may convey thus to us a satire upon the departed, which it was never intended to hint at. The Abbé Cochet seems to me[a] to lay too much stress upon "la coûtume Chrétienne de rendre à la terre les hommes nus comme ils y sont entrés." For this principle would have prevented the burial with ornaments,[b] of which, however, we are

[a] *Normandie Souterraine*, p. 194. See also Keysler, *Antiq. Select.* p. 174.

[b] See also the account of the plundering of the gorgeously-arrayed corpse of Pope Adrian I. in Mabillon,

told in the *Capitularia Regum Francorum*, ii. 852 (cf. also p. 701), "Mos ille in vulgo obsoletus in funeribus episcoporum et presbyterorum retinetur."

In many of these semi-oriented graves nails with woody fibre still adhering to them were found, and from their presence, as also from that of a piece of coffin-hooping (see Plate XXIV. fig. 6, and Dr. Thurnam, *Catalogue, Osteological Series, Royal College of Surgeons*, ii. 881, 5712) in one of these graves, we may argue with considerable probability for the employment of coffins in some, at least, of these interments. The custom of throwing shards, and flints, and pebbles into the grave is common both to Romano-British and to Anglo-Saxon interments in England. That it was pagan and even of very early origin seems probable, and that it persisted into Christian periods is pretty certain. Shakespeare's well-known lines[a] (Hamlet v. 1) show, however, that its pagan origin had somehow or other so strongly impressed itself upon the public mind that it was no longer practised in Christian burials. They show also that the presence of these shards cannot be explained as being due to accident. Indeed, upon several occasions, I have found fragments of pottery in such relations to the bones of skeletons, in company with which nails were found, as to make it seem highly probable that the shard, when thrown in, must have clanked upon the boards of the coffin, which the nails show us was present there. The thought that our own custom of throwing earth into the grave during the burial service may be connected with this custom, and again, that both may be connected with the classical custom referred to in Horace's line, "Injecto ter pulvere curras," and also Virgil, *Æneid*, vi. 365, and in Sophocles *Antigone*, 256, λεπτή δ' ἄγος φεύγοντος ὡς ἐπῆν κονίς, will at once suggest itself; but only to be dismissed on mature consideration; for to the modern antiquary it is no paradox to say that the custom of throwing in shards was probably much older than that of scattering earth over the corpse; and I would suggest, as it is very likely others may have done before me, that the throwing in of the broken pottery may be the perfunctory representation of the deposition in the grave of the entire vase, and that the throwing of earth, for which Archytas and Palinurus begged, may in like manner represent

Museum Italicum, i. 41; Gretzet, *De Funere Christiano*, i. 28; Chrysostom, *Hom.* 84; Guichard, *Funerailles*, 1581, p. 581, where the Council of Auxerre is said to have condemned "toutes ces bobances."

[a] Douglas, in his *Nenia*, appears to be the first person who drew attention to the lines of Shakespeare, referred to, see p. 10, and also p. 34. For other references to the custom, see Keller, *l.c.* p. 65; Wylie, *Fairford Graves*, p. 25; Akerman, *Pagan Saxondom*, introd. p. xvii.; Weinhold, *Sitzungsberichte Kais. Akad. Wiss. Wien. Hist. Phil. Klasse*, 1858, bd. 29, hft, i. p. 166. Fried. Simony, *Die Alterthümer vom Halstatter Salzberg, Sitzungsberichte Kais. Akad. Wiss. Wien. Phil. Hist. Klasse*, 1851, p. 7; Keysler, *l.c.* p. 106. Rev. G. R. Hall. *Nat. Hist. Trans. Northumberland and Durham*, i. 2, 1866, p. 167.



ANTIQUITIES FROM AN ANCIENT CEMETERY AT FRILFORD. (II.)

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the toilsome but unattempted process of inhumation.[a] Massillon, long before prehistoric archæology had been thought of, argued for the conclusion that a belief in a future state is a naturally implanted conviction from the fact that "nulle part vous n'en renconterez des peuples sans sépultures et sans vases," and the Abbé Cochet, in his *Archéologie Céramique*, p. 1, says that the custom of placing earthen vessels in tombs is one of the most ancient of all customs, and, as just noticed, that it still exists in secluded and remote parts of France, as in Morvan and La Bresse. This coexistence with the custom of our modern burials seems to disprove any interdependence of the two practices. Again, the fact that fragments of pottery were used in interments by cremation, as well as in interments by inhumation, seems to show that the shard and the handful of earth were not set in motion by the same impulses. In very early times earthen vessels were of great value, and it was in those days a proof of at least as great affection to bury or throw on to the funeral pile an earthen vessel as it was in after ages to burn his gorgeous insignia with Pompey.[b] I take this opportunity of quoting a passage from a curious work, the only one[c] of very many old books which I have looked through in the Bodleian and elsewhere for some passage parallel to the one quoted so often from *Hamlet* in which I have found one. This book is entitled *Funus Parasiticum, sive L. Biberii Curculionis Parasiti Mortualium, Ad ritum prisci Funeris*, Auctore Nicolao Regultio, Lubeccæ, MDCXXXVII. In describing the imaginary funeral of the parasite whom he is satirising, the author uses the following words: "Cum quisque certatim in rogum dona cumulat, et partim trullas, cantharos, lances, alii struices patinarias, cyathos, ciboria coquinaria, omnia flammæ committunt." It is obvious, of course, that the author may be representing the throwing in of these articles as being the most natural thing to do at the funeral of a glutton, as they had been his *instrumenta artis;* and Peniculus, it may be recollected, in the *Menæchmi* of Plautus, i. l. 25, speaks in terms of unctuous affection of his hosts' *struices patinarias*—the very words employed by Regultius. Still I am inclined to think that Regultius may have had some recollection, or at least some tradition, of the custom considered as so distinctively

[a] For the tendency of customs involving expense to assume cheaper forms, see Sir John Lubbock, *Nat. Hist. Rev.* Oct. 1861, p. 801; *Prehistoric Times*, p. 98, ed. i. p. 142, ed. ii.

[b] See *Lucan.* ix. 175.

[c] Since writing as above I have met with the following passage in Keysler's *Antiquitates Selectæ*, p. 173. "Inde Nimischæ, in pago uno miliari a Gubena distante universus adparatus culinarius erutus, cacabi, ollæ, catini, phialæ, patinæ, urceoli, lagenulæ, testante D. *Christiani Stieffii Epistola.*" This Epistola was published in 4to. in 1704, and treats of "Lignicenses atque Pilgramsdorficenses urnas." See Keysler *loc. cit.* p. 113.

heathen by the priest in *Hamlet* when he introduced this particular feature with so much iteration into his burlesque *ad ritum prisci funeris*. Writing at Lubeck, he may well have been familiar with the Baltic provinces further eastward, which the Teutonic knights had so much difficulty in civilising and Christianising.

Roots of plants had twined themselves about and around the bones contained in these graves, and the minute mollusc[b] *Achatina acicula* was found inside the skulls in such abundance as to make it very evident that air and moisture had very free access even to the bottom of these graves, and consequently we should not be justified in arguing from the want now in many of these graves of any traces of such perishable materials as the wood and metal-work of a coffin, to the conclusion that no coffin had been put into them 1,400 years ago. The wonder, indeed, is not so much that such substances should in some instances and in such circumstances have vanished, as that they should in any have persisted to the present day. Still I am inclined to think that evidence is not wanting to show that in some cases the Romano-Britons, like other races in ancient, mediæval, and modern times, interred their dead sometimes with, sometimes without, coffins. This evidence lies mainly in the fact that in some cases a large stone has been found so near the head as to render it difficult to think any coffin, however thin its walls, can have been interposed between the stone and the body. (See Catalogue, xv[3], Sept. 26, 1868; xvii[3], Sept. 26, 1868.) But even in these interments, where coffins may not have been employed, and which consequently so far resemble the Anglo-Saxon burials by inhumation shortly to be described, three important and easily recognisable differentiating peculiarities are present. First, stones do not appear to have been placed by the Romano-Britons under the head of the corpse, as they were placed in Anglo-Saxon interments, and consequently we do not find in the former, as we do in the latter so very commonly, the cervical vertebræ impacted along the base of the skull from the occipital foramen up to the symphysis of the jaw. Neither do the Romano-Britons, at least at Frilford, appear to have set stones along the sides of their graves, as the Anglo-Saxons did. Thirdly the Romano-British graves, when recognised as such, in contradistinction to the Anglo-Saxon interments, by the help of these external peculiarities, are found to contrast with them in a point of even greater as it is of more intrinsic interest, viz., in the very large proportion of aged skeletons which they contain. The male Anglo-Saxon skeletons are invariably, or all but in-

[a] See Wylie, Archæologia, xxxvii. 467.

[b] See Schaafhausen, *Die Germanische Grabstätten am Rhein*, p. 125; and *Collectanea Antiqua* (vi. 201), a work with which I was not acquainted when I wrote, as above, for account of a Cemetery at Kempston.

variably, the skeletons of young men: quite the reverse is the case with the Romano-British. To this point, as resting upon anatomical evidence, I shall have to revert in the second part of my paper; it is sufficient here to say that the difference is just what would be observed now between the cemetery of a settled civilized Christian village and that of an outlying station on the border-land between some gradually advancing empire, and the territories of some gradually receding but intermittently aggressive aborigines.

III. *Of the Anglo-Saxon Interments in the way of Cremation.*

Ten urns containing burnt bones have come into my hands during the excavations carried on at Frilford. Of these two were patterned urns, and the rest plain. A fairly perfect patterned vessel from this cemetery is to be seen in the British Museum, and two patterned fragments have been recovered by me and have been figured in Plate XXIII. figs. 2 and 3. These three latter vessels I incline to think, on account of their size, may have been holy-water vessels rather than cremation urns. The pattern upon them, as well as that upon the patterned urns which were found with burnt bones inside them, is the pattern now so familiar to us as the Anglo-Saxon pattern, from the memoirs of Kemble, Akerman, the Honorable R. C. Neville and others; and the general style and conformation of all the urns patterned and plain alike is not much less plainly referable to the same type. Neither class of urns has been lathe-turned; in none of them is the bottom perfectly flat; they are all of a darkish colour, and, though this colour may occasionally have a tawny streaking intermingled with it, it has usually been protected from reddening by the intermixture of vegetable matter with the paste. The figured urns possess the vandykes, the punched stellate or multiradiate stamps, the circular thumb-made depressions, the encircling zones scored with a pointed stick, and the "characteristic bumps," so fully and accurately described by Mr. Kemble in the *Horæ Ferales*, pp. 87 and 222, as distinguishing Anglo-Saxon urns found in England as well as urns found in the North-German fatherland.[a]

The Frilford urns are, with the exception of those found at Long Wittenham, the first urns of Anglo-Saxon manufacture which I have seen recorded as

[a] See also for figures of urns resembling those found at Frilford; Engelhardt, *Denmark in the Iron Age*, English translation, 1866, p. 9; Urn from Smedeby, Slesvig; Akerman, *Pagan Saxondom*, Introd. p. xxviii. and pl. iv.; *Archæologia*, vol. xxxviii. pl. 20, fig. 1.; Hon. R. C. Neville, *Saxon Obsequies*, pls. 24-33; Bloxam's *Fragmenta Sepulchralia*, p. 59; Roach Smith, *Inventorium Sepulchrale*, introd. p. xv. For the discovery of a bone-punch for stamping ornaments, see Schaafhausen, *Die Germanische Grabstätten am Rhein*, p. 139, 1868.

found in Berkshire. Mr. Wylie[a] has put on record similar "finds" from some thirteen English counties, to wit, Warwickshire, Nottinghamshire, Derbyshire, Northamptonshire, Yorkshire, Lincolnshire, Gloucestershire, Oxfordshire, Norfolk, Suffolk, Bedfordshire, Cambridgeshire, and the Isle of Wight. The *Horæ Ferales*, p. 229, enable us to add a fourteenth county, Sussex, to this list. An urn, which I have by the kindness of the authorities of Queen's College, Oxford, been allowed to figure, and which a short note in the catalogue existing in their magnificent library may be taken as localizing with some probability to Faversham, in Kent, gives us this county,[b] in which cremation like the paganism with which it was correlated was earlier superseded than elsewhere by Christianity, as a fifteenth in which Anglo-Saxons established themselves whilst still heathens. Berkshire makes the tale up to sixteen. When we consider how distinctively Christianity opposed[c] itself to the practice of cremation, every fresh discovery of these distinctively Anglo-Saxon urns shows us how thoroughly overrun our England was by the "heathen of the Northern sea"[d] in the period which elapsed between the landings

[a] *Archæologia*, xxxvii. 473.

[b] For the rarity of the discovery of cremation urns, at least in an unbroken, undisturbed condition, in Kent, see *Inventorium Sepulchrale*, xv. xlvi. 184, 186; *British Assoc. Report*, 1855, p. 146; and Mr. Wylie, *loc. cit.* The Queen's College urn I have figured, Plate XXV. fig. 1. Its Anglo-Saxon origin is indubitable. The evidence for its coming from Kent amounts only to probability, and stands thus: in Queen's College Library there is a "List of the Collection of Egyptian, Etruscan, Greek, Roman, British, and other Antiquities, formed by the late Rev. Robert Mason, D.D. from the collections of Messrs. Belzoni, Salt, Burton, Millingen, and others, 1822 to 1839." In this catalogue there is the following entry: "Sepulchral urns, a large and small, 2." On the smaller of these two urns, which, however, is of Roman manufacture, there is a ticket, "Found at Faversham, Kent." The exteriors of the two urns have much the same colouration or discolouration, which makes it seem likely that they came from the same excavation, and were, consequently, as we now find them, catalogued and placed together.

[c] For the opposition of the Christians to the practice of cremation, see Neander's *Life of Julian*, English translation, p. 108; Ibid. *Minucius Felix*, cit. p. 45; *Acta Martyrum*, Baron, ii. p. 290, Martyrdom of S. Tharacus; Tertullian, cit. Grimm, Berlin Abhand. 1849, p. 207; *Ep. Ecc. Vienn. et Lugduni, fin. Euseb.* H. E. v. 1, cit. Pusey, *Minor Prophets*, Amos, vi. 10; Charlemagne, *Capit. ad Saxon.* 789, A.D. cit. Fleury, *Ecc Hist.* i. 44, 45; Gruber, *Origines Livoniæ*, cit. Wylie, *Archæologia*, xxxvii. 467; Kemble, *Horæ Ferales*, p. 95; Schaafhausen, *Germanische Grabstätten am Rheine*, p. 90; *Jahrbuch des Vereines von Alterthums-freunden im Rheinlande*, Bonn, 1868.

[d] Literary evidence for the numbers of the Saxons is furnished by such expressions as those which Claudian puts into the mouth of a personified Britannia,

"Ne litore *toto*
Prospicerem dubiis venientem Saxona ventis."—*Laus Stilichonis*, xxii. 254.

Evidence for the sudden and continual vexations to which Britain and other regions were subjected by the Saxons may be found in *Ammianus Marcellinus*, xxvi. 4; xxviii. 2.



M. A. Matthewman, del.

ANTIQUITIES FROM AN ANCIENT CEMETERY AT FRILFORD. (III.)

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in it of Hengist and that of Augustine. The legend which makes Hengist land in Thanet and be buried at Conisborough, in South Yorkshire, tells obviously in the same direction, but it is always well to strengthen a conclusion based on the interpretation of such a history as this by evidence drawn from actual, tangible, and verifiable facts. And it is worth while, consequently, to put on record here certain "finds" of Anglo-Saxon urns which have been made subsequently to, or, for other reasons, have not been enumerated among those already referred to. In the year 1859 five urns of the Anglo-Saxon type, which are now to be seen in the museum of the Philosophical Society in York, were found by F. W. Calvert, Esq., in his garden, which is about half-a-mile outside of Micklegate Bar on the right side of the road from York to Tadcaster. Several Roman urns and sarcophagi were found at the same time and place, the Anglo-Saxons having in this, as in so many other Roman stations, used the cemeteries of their predecessors. An urn with an inscription, which I have not seen, was found at the same time. Five other undoubtedly Anglo-Saxon urns are mentioned in *The Descriptive Account of the Antiquities* of this Museum, (p. 95, n. 34) as being found in tumuli on the Wolds. An urn[a] as indubitably Anglo-Saxon has been discovered at Kempston, in Bedfordshire, for a sight of which I am indebted to the kindness of Canon Greenwell of Durham. Lastly, in the "Illustrated London News" of Jan. 25, 1868, Supplement, p. 93, some excellent figures of several urns found by Dr. Massey of Melbourne, at King's Newton in Derbyshire, may be seen; and though I have not as yet had an opportunity of personally examining these specimens, I apprehend they will be recognised as belonging to the same class as the North German urns of the *Horæ Ferales;* the South Jutland or Slesvig urns figured by Engelhardt, *loc. cit.* and pl. 14 and 17; and those from the sixteen English counties above enumerated. If, as Mr. Kemble has said, "wherever Christianity set foot cremation was to cease,"[b] we may be doubly sure that wheresoever cremation was practised in a country which had been previously Christian, Christianity had for the time become extinct. Of the coexistence *in place* of cremation-urns and of skeletons inhumed entire there is no doubt; and, as many authorities seem convinced that the two practices coexisted also *in time*,[c] I should be slow to set against their opinion the fact of

[a] See *Collectanea Antiqua*, iv. 161, vi. 166, vi. 201, *seqq.*

[b] *Horæ Ferales*, p. 95.

[c] For the coexistence of cremation with inhumation: see Kemble, *Horæ Ferales*, p. 918; Neville's *Saxon Obsequies*, p. 11; Wylie, *Archæologia*, xxxvii. p. 456; Akerman, Further Researches at Brighthampton, *Archæologia*, xxxviii.; *Inventorium Sepulchrale*, pp. 165, 195; Weinhold, *Sitzungsberichte Kais. Akad. Hist. Phil. Klasse*, bd. 29, p. 138, bd. 30, p. 176; Lindenschmit, *Archiv Anth.* iii. 114.

the strong feeling which the Christians entertained as to the impiety of cremation. For I read in the passages just referred to, and can believe, that a practice was not always nor immediately discontinued because it was denounced. Still, at Frilford, though in three cases urns were found above Romano-British inhumations, in no case had I any reason to think that one part of the population on this area was practising the one, at the same time that another was practising the other, of these two modes of sepulture. If it should be allowed—in dangerous opposition, it is true, to Mr. Kemble's dictum that no pagan Saxon was buried except when burnt,[a]—that the Anglo-Saxon inhumations, shortly to be described as without orientation and with relics, may have been the burials of pagans, I should be more inclined to think that the two rites may have been practised contemporaneously, as we know them to have been by several heathen nations. To the heathen the two modes of sepulture were comparatively indifferent, and very slight reasons may have determined his choice of the one or the other. With the Christian it was different, and abstinence from cremation was made to seem a corollary of some of the most sacred and cherished articles of his faith. Hence I am not disposed to think that the conquered Romano-Britons would continue to use the cemetery of their forefathers when it was constantly being, as they would think, desecrated by the deposition in it of the urns of the unbelievers. The Saxons, on the other hand, as already remarked, had no reluctance against burying in the ground which held the bones of the former lords of the soil, and as the position of several of the urns show—

> "Little they recked of those stout limbs
> Which mouldered there below."

I should add that it is possible that half-converted Saxons may have relapsed into cremation in the absence of the missionary, and under the temptation which the licence of the "lyke-wake" created. But the practice of such a transitional period, if it ever existed, would not affect the historical argument for the overrunning of this country by heathens, which the discovery of these urns in so many parts of it furnishes.

In Plate XXV. fig. 3, a representation is given of a piece of Samian ware found in the Roman rubbish-pit already mentioned as having been discovered within about 200 yards of the cemetery. The resemblance of its pattern to that on the Anglo-Saxon urns is very striking, though the execution and finish are as different as is the material. A pattern of vandykes, scored zones, and stellate impressions,

[a] *Horæ Ferales*, p. 98; and, *per contra*, the Rev. S. Finch, *Coll. Antiq.* vi. 220, and Thrupp, *Anglo-Saxon Home*, p. 399.

is one which, by its simplicity, would suggest itself to the rudest nations, and I do not, of course, mean to hint that the urns found here by me were figured after the pattern of Roman ware found here by the Anglo-Saxons. Still the similarity of the two patterns is very striking, and when we consider that urns with Latin inscriptions and Roman manufacture have been found with Anglo-Saxon patterns upon them,[a] it is less difficult to imagine that the Teutonic races, years before the period we are dealing with, and while yet in their North German native country, imitated with a stick on coarse hand-fashioned clay-paste the very simple but still beautiful pattern which the Gallo-Romans imprinted on finer and lathe-turned materials. Another illustration would thus be furnished of the extreme readiness already alluded to with which the Germanic natives imitated the arts and refinements of the Romans.

Burnt human bones have been here and there met with without any urn in relation with them, but within my experience at Frilford they have been merely scattered or even single bones, the presence of which may be explained by the disinterment of an urn, and the subsequent replacing of its fragments and its contents with less care than was sometimes bestowed upon this task.[b]

In none of the urns were any other contents than human bones mingled with earth and stones discovered, except in the case of the urn found Sept. 1867, in which a few pieces of glass were found together with the bones, and in that of the small unpatterned urn found January, 1867, in which the incisor of a hare or rabbit was also found in company with the human remains, and like them had been subjected to the fire.

The urns were in most instances at but a very short distance from the surface of the ground, and, shallow as the furrows are (some five inches or so) which it is usual to make in this soil, the upper rims of the urns have in several instances received injury from the plough-share. This superficial position of cremation urns enables us to understand how the many superstitions[c] as to their pullulation in the spring, &c., arose, and it is paralleled, we may remark, by the shallowness of the inhumations of the same race, to the consideration of which I now proceed.

[a] See Roach Smith, British Association Report for 1855, p. 145, and the same writer's *Collectanea Antiqua*, v. 115, pl. x. where such an urn, bearing the inscription D.M. LAELIAE RUFINAE VIXIT A.III.M.III.D.VII. is figured.

[b] See *Inventorium Sepulchrale*, introd. p. xvi. pp. 8, 9, 12, 17, 18, 19, 40, 156, 159, 175.

[c] For the belief as to urns being "natural productions pullulating from the earth like bulbous roots," see *Horæ Ferales*, p. 86. For other superstitions relating to them, see Cochet, *Normandie Souterraine*, p. 124; Wylie, *Archæologia*, xxxvii. 46.

IV. *Of Anglo-Saxon Interments in the way of inhumation without orientation, but with insignia and in shallow graves.*

The Anglo-Saxons appear to have discontinued cremation, probably at the urgent request of the Christian missionaries, without at the same time adopting the direction of the grave which the usage of their teachers, as well as of their predecessors, would have led them to adopt. The shallowness[a] of many graves containing skeletons extended at full length, and adorned with Anglo-Saxon insignia, may again be referred to the retention by half-converted proselytes of some of that carelessness as to the disposal of the corpse which marked many heathen races then, as, indeed, it does now. The now well-known insignia of the male and female Anglo-Saxon respectively—to wit, the umbo, the spear, the buckle, and the knife; the fibulæ, the perforated beads, the similarly perforated glass ornaments; the ear and tooth picks, the scoops, the shroud-pin, the perforated coins, and the knife, found both with women's and men's skeletons—have been found with several skeletons at Frilford, which were interred in graves varying in depth from eighteen up to twenty-seven and thirty inches, and varying still more in their compass bearings. In four of these cases, skeletons, which must be supposed to have been Romano-British, have been found to underlie these Anglo-Saxon remains, just as similarly inhumed skeletons have been already spoken of as underlying cremation urns. In one case a large fragment of a large unpatterned urn (which has been figured in Pl. XXIV. fig. 1, and resembles in style the urn found at Long Wittenham, containing human bones, and figured by Mr. Akerman, *Archæologia*, xxxviii. 352, pl. xx. fig. 4,) was discovered lying over the pelvis of an Anglo-Saxon woman, buried with disc-shaped fibulæ, beads, and shards. The fragment was itself in seven pieces when discovered; but, as they have admitted of readjustment, the fragment must have been put into the grave in the condition which it is in as now restored, in accordance with the custom of carefully replacing the fragments of a disturbed funeral urn, which has been several times noted in other Saxon burials.[b] In another of these interments some Roman tiling was found set along the side of the grave, a practice which other Teutonic tribes, in their imitation of the Roman civilisation, adopted, as has

[a] For the shallowness of Anglo-Saxon and other Teutonic interments, see Cochet, *Tombeau de Childeric*, p. 41; Bloxam, *Fragmenta Sepulchralia*, p. 47; Englehardt, *Denmark in the Early Iron Age*, p. 9; Akerman, *Archæologia*, vol. xxxviii., *Long Wittenham*; Kemble, *ibid.* vol. xxxvii. 1856; Wanner, *Alemannische Todtenfeld bei Schleitheim*, pp. 10, 20.

[b] See *Inventorium Sepulchrale*, introd. p. xvi. &c.

been observed by Wanner.[a] In another, a spear-head (Plate XXIII. fig. 7) with the raised ridge, which Mr. Akerman (*Pagan Saxondom*, p. x.) has observed is to be seen on the assagaye of the modern Hottentot, was found accompanying a skeleton, the sex and nationality of which were spoken to by the presence of an umbo and a buckle,[b] as well as by its osteological characters. Fibulæ were not found with the male skeletons; with the female skeletons the common disc-shaped fibulæ were the most usual. In one case, however, the cruciform variety, such as Mr. Akerman has figured (*Archæologia*, xxxix. pl. xi. figs. 8, 9) from Long Wittenham, or (*Pagan Saxondom*, pl. xviii. fig. 1) from the neighbourhood of Rugby, was exemplified in two fibulæ (Plate XXV. figs. 6 and 7) found with a female skeleton, which was accompanied also by the earpick and toothpick and scoop so frequently found in Anglo-Saxon interments.[c] No sword has as yet been found in the cemetery at Frilford, and the general character of the Anglo-Saxon relics which have been discovered is in keeping with the absence of this mark of condition and authority, if such[d] it may be considered to be. In one case a male skeleton was reported to me to have been found lying in one of these shallow graves with its face downwards. Unfortunately I was not upon the spot when this skeleton was removed; but, though Schaafhausen[e] has pointed out that unskilled observers may be deceived as to the position of the face in a grave, I am nevertheless of opinion that the workman who had assisted in the removal of a very large number of skeletons from their graves was right in the report he made to me. Because, in the first place, I have myself seen an instance of such a mode of interment in a Romano-British barrow; and, secondly, it is not difficult to understand how such a misplacement could occur with an uncoffined body borne to a grave, the shallowness of which bore, and bears, evidence to a carelessness which the "lyke-wake" would be only too likely to intensify. It has often been observed[f] that the Anglo-Saxons by no means

[a] *Das Alemannische Todtenfeld bei Schleitheim*, p. 13. See also Lindenschmit, *Archiv für Anthropologie*, ii. 3, p. 356.

[b] For the indications which the presence of a buckle furnishes as to nationality, see Akerman, *Pagan Saxondom*, p. 58; Cochet, *Tombeau de Childeric*, pp. 228, 234.

[c] See *Pagan Saxondom*, p. 70, and pl. xxxv. fig. 4; *Archæologia*, vol. xxxvii. *Brighthampton* No. 1; vol. xxxviii. *Brighthampton* No. 16, preserved in Ashmolean Museum, Oxford; *Fairford Graves*, pl. ix. fig. 10, object similarly preserved.

[d] See Akerman, *Archæologia*, vol. xxxix. "Further researches at Long Wittenham."

[e] *Die Germanische Grabstätten am Rhein*, p. 119.

[f] Wylie, *Graves of Alemanni*, p. 13; Bloxam, *Fragmenta Sepulchralia*, pp. 67, 72; Akerman, *Pagan Saxondom*, introd. p. xvi. Compare plate xiv. with plates xxxix. lvii. lxii. and lxvi. of Strutt's *Horda Angel-cynnan*.

invariably employed coffins in their interments. When the head is found to have been supported upon stones placed underneath it, it is plain that the interment must have been coffinless. But I do not find in my notes of the class of shallow, non-oriented, Anglo-Saxon interments that the head had been so supported; and, inasmuch as the results of its having been so raised are ordinarily very evident, the cervical vertebræ being impacted between the *rami* of the lower jaw, and this bone being, not rarely, separated widely from the upper jaw, owing to the changes of position which the perishing of the soft parts has entailed,—it is difficult to think that this peculiar arrangement would have been left unnoticed if it had existed. A nail has occasionally been found in a grave containing an Anglo-Saxon skeleton, but I have never come upon nails in such numbers as to make me think it probable that they had come there otherwise than accidentally, nor have I ever found in such interments that all but infallible sign of a coffin having been employed, namely, coffin-hooping. The shallow Anglo-Saxon graves do not appear to have had stones set round their edges; and the absence of such stones is another, and complementary, illustration of the carelessness which appears to have characterised the performance of these burials. Wherever stones have been found set round a grave, the grave has had the semioriented bearings of the Romano-British interments, and has all but universally the same depth as these graves, and may hence be considered to belong to a distinct era of inhumation.

V. *Of Anglo-Saxon Interments in the way of inhumation in graves of the same compass-bearings, and usually of the same depth, as the Romano-British graves, but differing from them in having stones set along the edges of the grave, and in containing insignia together with the skeletons.*

I have not at Frilford come upon a grave with stones set round its edges which had not the Romano-British direction towards E.S.E., and which did not contain a skeleton with the insignia of the Anglo-Saxon race. Following the Romano-British direction, these interments have followed the same precedent ordinarily as to depth also, and the like, it may be noted, has been observed by Wanner of the Alemannian interments at Schleitheim.[a] The closeness of the stones to the sides, head, and feet of the skeleton seems to preclude the notion of coffins having been employed in these interments, and the fact that the sides of these stones, which looked towards the skeleton, were in some cases reddened in a way in which actual

[a] *Das Alamannische Todtenfeld bei Schleitheim*, pp. 11, 18.

experiment shows that similar stones of the neighbourhood do redden under the action of fire, makes it appear all but certain that the charcoal found in these graves around and even under the skeleton must have been produced by a fire lighted in the grave before, or indeed after, the corpse was put into it.[a] Mr. Kemble, in the passages already referred to,[b] supposes that in the transition state from heathenism to Christianity, such practices as this may have been stealthily indulged in by the newly-made and only half-converted proselytes, and these interments lend a considerable confirmation to this view. The Abbé Cochet[c] and Professor Schaafhausen[d] seem to incline towards supposing that the similar appearances which they have noticed are to be ascribed to the remnants of a coffin, but I am inclined to think that the absence of nails, the raised position of the head observed in some of these burials, the large size of, and the retention of a certain brilliancy by, the fragments of carbonaceous matter found in these graves, and underneath as well as around the skeletons, as well as the conditions of reddening and of position which the stones present, are points militating very strongly against the hypothesis of a coffin having been present, and in favour of a wood fire having been lighted in the grave either in preparation for, or for the partial combustion of, the dead body. No coins were found in such relations with the head or chest of any of these skeletons as to make it seem likely that they had been put in as "portoria;" in one case, however, a coin was found perforated, for suspension, doubtless as an ornament, about the region of what had been the chest or waist of a very much water-worn skeleton. Shards and flints, and a few bones and teeth of domestic animals, were found in these as in other kinds of inhumation observed in this cemetery. In one of these interments a pair of odd fibulæ, one being of the cruciform, the other of the saucer or disc pattern, was found, one upon one shoulder and the other upon the other of a female skeleton. Similarly, or somewhat similarly, "two large cruciform and two circular fibulæ of bronze," now preserved in the York Museum, were found with a skeleton in the Danes Dale Tumulus.[e] These discoveries may seem of trifling moment, but they do go to show, first,

[a] In a note from Professor Pearson to me, in which he gives much valuable information upon other points relating to the history of this country in the times with which I am concerned, he says, "The *Anglo-Saxon Laws*, vol. ii. contain several lists of superstitious practices which the Church condemns, such as burning corn upon graves. It is true that the compilations in which these ordinances occur are in one sense not authentic, that is, have been ascribed to wrong authors; but they probably represent the customary law of the church here and on the continent with tolerable fidelity."

[b] *Horæ Ferales*, pp. 98-104.

[c] *Opere cit.* pp. 198, 255, 256, 304.

[d] *Opere cit.* p. 104.

[e] See Catalogue, p. 93, and *Coll. Antiq.* vi. Pl. 28.

that no pattern of fibulæ should be considered as peculiar to any one district, except provisionally; secondly, that a very considerable uniformity may have existed in the manners and customs of the Anglo-Saxons throughout the entire length of England; and, thirdly, that, inasmuch as intercommunication between places as far apart as Frilford and Driffield must have been difficult in those days, the numbers of the invaders of these similar fashions and habits must have been considerable.

The stones were set round in the grave in but a single row from within outwards, and in height they do not seem to have extended from the bottom of the grave further upwards than a stone coffin, of which they may be supposed to have been a cheap imitation, would have done. The graves here, as at Selzen, are narrowed towards their lower ends.[a] In such interments as these the skull may or may not be found to rest upon a stone which had been put under it in the way of support, and which has caused the lower jaw to settle down upon the cervical vertebræ, and to hold them impacted between its *rami*. The Anglo-Saxon habit of thus placing stones beneath the head of the corpse may or may not be adumbrated by the mediæval stone-pillow in monuments as suggested by the Abbé Cochet;[b] but, at all events, it goes some way towards proving that coffins were not employed in the interments in which it is noticeable.

In one of these graves a mass of what has been called a "scoriform" lava, though it is different enough from the true *scoriæ* or slag similarly found in Anglo-Saxon graves at Fairford by Mr. Wylie,[c] was found at the foot of a female skeleton. The bulk it made up was about that of an orange, and, as it has separated into two coadaptable halves, each of which resists very violent hammering, we must suppose that since it was put into the grave it must have been subjected to some disrupting agency which acted upon it with great force, and yet left it, when broken asunder, *in situ*. It is possible that the piece of lava in question may have been broken into two pieces by the action of a fire lighted in the grave, as, it has been suggested, was the case with a mill stone found split to pieces in a Saxon grave discovered[d] at Winster in Derbyshire, and showing, which this grave did not, signs of a fire having been lighted in it. But one of the many valuable hints which I owe to Professor Phillips has made me think that it may be to frost rather than to fire that we ought to look to account for the fractures

[a] See Lindenschmit, *Archiv für Anthropologie*, ii. 3. 356, in review of Wanner's *Memoir, Das Alamannische Todtenfeld bei Schleitheim*; Schaafhausen, *op. cit.* pp. 131, 154.

[b] *Normandie Souterraine*, ed. i. p. 192.

[c] *Fairford Graves*, p. 24.

[d] Extract from the "Times," Thursday, Oct. 23, 1856, given in *Horæ Ferales*, p. 104.

of volcanic products such as these. A porous soil would allow the cavities of such a piece of lava to become filled with water, and a shallow grave in a severe winter might furnish the other requisite conditions. Some mortar-like matter was adherent to the exterior of the piece of lava besides and distinct from the calcareous incrustation which the water of the soil had deposited upon it. The lava itself, as containing *hauyne*, we may be justified in regarding as having, in all probability, come from Niedermennig, which is a place whence, in the time of Augustus,[a] the Romans took building materials for the bridge at Trèves, and whence, as a matter of fact, mill-stones are now largely exported, and whence consequently, we may think it not wholly unlikely[b] they were exported in former and Anglo-Saxon times. It is difficult, of course, to be quite sure that a sub-globular mass such as the piece of lava I found at the feet of this Anglo-Saxon female had been a piece of a quern; but fragments, of identical, and closely identical mineralogical characters, found "near a barrow in Norfolk," and "in a British barrow at Thetford," respectively, have been considered as pieces of a millstone by the well-known antiquary J. Wickham Flower, Esq., to whose kindness I owe the opportunity of comparing these several sets of volcanic fragments together.

Schaafhausen[c] has put on record several instances of Germanic interments either in coffins made out of *tufa*, or in graves with fragments of such volcanic matter set round their copes, together with other stones, and it is just possible that the Niedermennig lava may have been put, as it was in this grave, at the foot of the grave, whilst other stones were set round the sides, as a kind of reminiscence of what the "setting" of the interment might have been elsewhere. But I am not aware that we have any reason for thinking that the Anglo-Saxons, who, rather more than a century[d] after the first invasion drove the "Southern Belgæ or Firbolgi" out of Berkshire into Wales and Damnonia, received any accessions to their numbers from regions so far south as Andernach and Coblentz,[e] where such interments could be easily, and were frequently made; and it is more probable that a fragment of lava may have been put into a grave in its aspect of a fragment of a millstone, an implement of daily life, than in its aspect of a fragment of the same material as that out of which entire coffins or the entire "setting" of a grave had been made elsewhere.

[a] Daubeny, on *Volcanos*, pp. 49, 64.

[b] See Bruce, *Roman Wall*, ed. iii. 1867, p. 438, seen by me subsequently to writing as above.

[c] *Op. cit.* pp. 122, 127; Wren, *Parentalia*, p. 266. [d] See Beale Poste, *Celtic Inscriptions*, 1861, p. 71.

[e] Leo, however, in his *Ortsnamen*, p. 100-104, has tried to show that most of the local names near Heidelberg correspond to local names in Kent.

On the whole, I am inclined to regard these interments as belonging to a period of transition from the comparative if not total heathenism of shallower interments without orientation, and without the decent regard for the dead which the setting of stones round the graves indicates, to the more distinctively Christian mode of burial without insignia and in coffins. The greater depth and the direction of the graves I should regard as due to the teaching of the Christian missionaries; the adoption of the very graves used by the Romano-Britons may have been due merely to the imitative tendencies of the conquering races, or it may be ascribed to the influence of some remnants of the conquered Christians, who may have maintained their religion on sufferance, and their traditions as to the tombs of their fathers during the dark period which intervened between the invasion of Cerdic and the preaching of Birinus. The tricking out of a corpse with insignia of sex, or rank, or employment, seems half heathen to us who have the great truth that we can take nothing out of the world with us impressed upon us at times when we are most open to impressions; still it is just such a custom as a missionary with the proper amount of the wisdom of the serpent would acquiesce in. Time, such a teacher would know, was on his side, and he would feel that he could afford to wait.

It is possible that the differences between these two kinds of Anglo-Saxon inhumation may have been due to some social differences between the persons severally practising them, and that the deeper graves may have been dug for richer, and the shallower for poorer, persons. But the insignia in both alike are very closely similar, and I incline, therefore, to ascribe the greater care bestowed upon the latter class of interment not to any sense of the favours which a richer person had conferred in times past, but to the greater care which Christianity would teach ought to be bestowed upon the burial of the body.

The resemblance of the Anglo-Saxon manners and customs to those of the kindred but hostile race of the Franks, is very familiar to the English explorer of Anglo-Saxon cemeteries, if he be acquainted either with Lindenschmit's work, *Das Germanische Todtenlager beim Selzen*, or with the works of the Abbé Cochet so often referred to in this paper. The Merovingian[a] and the Anglo-Saxon resembled each other in their abhorrence of city life; and also in the melancholy point of their short-livedness which has already been alluded to, and which

[a] Gibbon, vi. 336, chap. xxxviii. for *Merovingians*; Tacitus, *Germania*, chap. 16, for Germans generally; Coote's *Neglected Fact in English History*, p. 123; Ammianus Marcellinus, xvi. 2-12; Pearson, *op. cit.* i. 264. Augustine brought Frank interpreters with him into Kent, Bede *H. E.* i. 25, and the Welsh poems sometimes speak of the Saxon enemy as a "Frank;" see Skene, *Four Ancient Books*, i. 460.

appears to be explicable by the fact that in the times we have been dealing with these races preferred a country life, it is true, to a town life, but a country life in a camp, not a country life in a village. As Temple (cit. Rapin, p. 161) and Leibnitz long ago remarked, there are other points which serve to show the community of origin of the Frank and the Saxon, such are their reckoning time by the nights, as the "fortnight," to say nothing of their closely allied languages. A minor point of community is furnished by their common employment of the Roman tiling to set round their graves. On the other hand, the Saxons retained the custom of cremation a century and a half longer than the Merovingians, and their urns were not lathe-turned, whilst those of the Selzen Teutons were. (See Lindenschmit, *l. c.*, p. 15.) Holy-water vessels have not been so constantly found at Frilford as they appear to have been at Selzen, from the beautiful figures given in the monograph referred to, or as they are expressly stated to have been by the Abbé Cochet in the Merovingian interments.[a]

VI. *Conclusions suggested by an Examination of the Human Remains found at Frilford.*

The cranial and other osteological peculiarities of the human remains which I have examined from the Frilford cemetery, seem to me to throw sometimes a very unambiguous, and sometimes, it must be confessed, a more or less questionable light upon certain of the moot points in the political and natural history of the period in which their owners lived. Among those points may be specially mentioned the often-raised and very variously answered questions, as to the extent to which[b] the Anglo-Saxon Conquest was equivalent to an extirpation of the population previously in occupation of this country;[c] and as to the physical and

[a] See *Archéologie Céramique*, pp. 11, 13.

[b] For the question of the extent to which the Celtic population were destroyed by the Saxon Invasions: see Pearson's *History of England during the Early and Middle Ages*, i. 99—103, 1867; Freeman's *Norman Conquest*, i. 18, 20; Akerman, *Archæologia*, 38, 2nd Report, Brighthampton; Turner's *Anglo-Saxon History*, i. 311; Wylie, *Fairford Graves*, p. 8; Kemble's *Saxons in England*, i. 21; D. Wilson, *Anthropological Review*, iii. 81.

[c] For the various views which have been held as to the Roman cranium: see Ecker, *Crania Germaniæ*, p. 86, 1865; Ecker, *Archiv für Anthropologie*, i. 2, p. 279, 1866; ii. 1, p. 110, 1867; Holder, *Ibid.* ii. 1, p. 58; His, *Crania Helvetica*, pp. 39 and 40; His, *Archiv für Anthropologie*, i. 1, p. 73, 1866; His and Vogt, Mortillet's *Matériaux pour l'histoire de l'homme*, August 1866, pp. 522, 523; *Crania Britannica*, p. 23, chap. ii. and *ad* pl. 49; Davies and Thurnam, cit. *Indigenous Races*, p. 312; Maggiorani, cited by Ecker, *Cran. Germ.* p. 88, and *Arch. für Anth. l.c.*; cited by v. Baer, *Bull, Acad. Imp. Sci.* St. Petersburgh, 1860, p.

more particularly the cranial characters of the Romans and Romanized Britons. But it is worthy of note that very indubitable evidence, at least as to some of the social and moral peculiarities[a] of the conquered and the conquering races respectively, may be gathered from a careful examination of their bony remains.[b]

I have subjoined in a tabular form the results of my examination of the sometimes fairly complete, sometimes exceedingly incomplete, remains of 123 burnt or buried bodies which have come into my hands from the excavations and quarrying carried on at Frilford at various times during the years 1864-68 inclusive. In spite of the ravages of fire in the cases of cremation, and the all but equally destructive working of the water containing carbonic and other acids upon inhumation in ground with the rock (coralline oolite) at an average distance of about a yard from the surface, it has been possible to identify the sex and age in all but about a sixth of the skeletons, or parts of skeletons, examined. Many skeletons, however, and many urns had been lost to science, as may be gathered from Mr. Akerman's report,[c] during the various quarrying operations carried on at various times previously to his investigations, and the arithmetical results of my researches are much less valuable consequently than they otherwise might have been. But I incline to think that the tolerably exhaustive and complete collection which the great kindness of the authorities at Frilford has enabled me to make of the fruits of the excavations carried on during the last two years, may be taken as a fair sample of what the entire series was.

One of the most striking peculiarities of the series of 123 skeletons, as represented more or less fragmentarily in the University Museum at Oxford, is the very large number of old persons' remains which it presents to our view. The most superficial observer cannot fail to be impressed by this fact. A little more accurate inspection shows that the proportion of aged persons varied most surprisingly

58, fig. g; Edwards, *Des Caractères Physiologiques des Races Humaines*, p. 50; Nott and Gliddon, *Indigenous Races*, p. 311, and Cardinal Wiseman, *cit. in loco*.

[a] As to the supposed degeneracy of the Britons, see Kemble, *Saxons in England*, ii. 294, i. 6; *Encyclopædia Metropol.* xi. 378; Zosimus, *cit. Mon. Hist. Brit.* lxxviii. vi. 6.

[b] As the German periodical, the *Archiv für Anthropologie*, is conducted under the joint editorship of Ecker and Lindenschmit, and as the latter, I apprehend, is as well known among archæologists as the former is among biologists, no apology will be needed for the constant reference which I shall have to make to its pages. It may be well to add here that the English reader can find a very clear account of the classification of crania adopted by His and Rütimeyer, and alluded to very frequently by myself, as also by various writers in the periodical just mentioned, in the *Prehistoric Remains of Caithness*, pp. 104, 105, a work written by S. Laing, Esq. M.P. and Professor Huxley, conjointly.

[c] *Proc. Soc. Antiq. ubi supra.*

in accordance with the nationality, and that of the persons of either sex who were interred with Anglo-Saxon insignia only two could have been considered old. We are, unhappily, even now too familiar with the history of invading armies to feel it necessary to spend much time in excogitating an explanation of this fact: it is worthy, however, of mention that a similar fact has been noted by the Abbé Cochet[a] in the burial-grounds of the kinsfolk of the Anglo-Saxons, the Merovingian Franks. The preponderance of longevity being seen to attach to the Romano-British population, the presence with these aged "frames" of coins bearing such names as those of Gratian tempts us to explain the phenomenon by the hypothesis of the young men having been taken away to fight and die in distant countries under such commanders as Magnus Maximus. Persons who some years ago had the opportunity of seeing village after village on the continent of Europe inhabited by forms like that of Tithonus, will be ready to accept this explanation as sufficient to account for the fact. Till I came to add up the various individual identifications of the two sexes which I had made from time to time, and without any reference to any historical relations which the skeletons or their owners might have possessed during life, I held this hypothesis myself. But on adding up the numbers of males and females severally, I find that I have assigned no less than 48 of the 123 bodies to the male sex, and only 34 to the female. Even if we add to the female series the 11 individuals as to whose sex I have felt myself unable to pronounce, the force of this arithmetic is but little impaired, or, indeed, not at all.[b] The fact of the great preponderance in number of aged remains may be explained by a reference to the present condition of the population on the spot. Frilford is renowned for its salubrity and the longevity of its inhabitants at the present day. The fact of the great preponderance of male skeletons is not so easy of explanation, and it is especially difficult of solution when we note that more than half of these male skeletons are aged ones. Barracks and prisons furnish an excess of male skele-

[a] *Normandie Souterraine*, p. 183.

[b] It has been suggested to me that the soldiers, who, on the hypothesis before us, are supposed to have left their bones in foreign lands, may have taken wives with them. But it could not have been often in days of such difficulty in travelling that "Lycoris

"Perque nives alium perque horrida castra secuta est."

The soldiers of Gustavus Adolphus were, very many of them, married men, but I do not know that their wives accompanied them to his famous battle-fields. The men, too, who fought and won at Lützen had very different motives and incentives from those of the recruits who followed the standards of the various "tyrants" and pretenders of the later Roman Empire, and it is only by means of such motives and incentives that men can be got in any large numbers to break away from family ties and join distant military expeditions.

tons in their burial-grounds, I apprehend, but not an excess of *aged* male skeletons. I am not aware that the monks of the west had established themselves among the Atrebates before the time of Cerdic.[a] And the only hypothesis which has suggested itself to me is that the part of the burial-ground which has fallen under my inspection may have been used by preference, though by no means exclusively, for male interments. The hypothesis of a battle is excluded by several considerations, and notably by that of the age of the skeletons.

Of the thirty-five skeletons assigned by me to the female sex, thirteen were of aged, and no less than nineteen of young, women. The great dangers of childbirth may be supposed to be indicated by these figures, and the osteophytic intracranial growths[b] so often observed in the puerperal state, and noted here in four cases, may point in the same direction. Under the head of children I have reckoned all persons below the age of thirteen or fourteen. The numbers of this class, viz. twenty-eight, which I have identified, holds a much smaller proportion to the whole number, 123, than we should expect from modern statistics. But the greater perishability of children's bones, and the lesser depths of their graves, which, if not more chemically, is yet mechanically more dangerous to their preservation, must be borne in mind in considering these figures, and should prevent us from basing any argument upon them over-hastily. Still, we may perhaps be justified in thinking that there could not have been at Frilford, even in days when glazed windows and coal were as little used as China-ware and "China drink," that great infantile mortality which, by weeding out all the weakly in early life, produces a population of adults with a great proportion of aged individuals.

The Anglo-Saxon remains which I have procured from Frilford have suffered much from the mechanical and chemical agencies to which the shallowness of their graves, and, secondly, the shallowness of the soil, exposed them; and the youth of their owners has still further rendered them amenable to these destructive and distorting forces. But, thanks to the reconstructive ability of Mr. Charles Robertson, I have been enabled to see that the two types of crania which have been shown by Dr. Barnard Davis to have been found with Anglo-Saxon insignia, both at Long Wittenham,[c] and at Linton, in Cambridgeshire,[d] coexisted

[a] See, however, *Hist. Mon. de Abingdon*, i. pp. 2, 3.

[b] Rokitansky, *Path. Anat.* Sydenham Soc. Trans. iii. 208; Bock, *Pathologie*, p. 209.

[c] See *Archæologia*, xxxviii. No. 107, 770 k. Oxford Univ. Museum.

[d] See *Crania Britannica*, Dec. 4, pl. xlvi. Two other crania of this "platycephalic" type have been found in the Frilford cemetery subsequently to the writing of this paper, viz. March 22, 1869 (No. iv. and

side by side in the Anglo-Saxon contingent which possessed itself of Frilford. I may remark that the two types are recognisable in specimens of both sexes, and a very fairly perfect female cranium has been figured (Plate XXIV. fig. 5) from a grave in which a pair of fibulæ and a number of beads were found, as it shows at once, and distinguishably, the tribal and the sexual characters, which have very often been confounded, and as from the surroundings with which it was found there is no doubt as to its value as a standard of reference. This skull appears to have belonged to the shorter and broader type of Anglo-Saxon crania, which was, I am inclined to think, the less cultivated of the two types. A second Anglo-Saxon female cranium found here belongs to the same type. A single female and a single male cranium of a more elongated form were also found with Anglo-Saxon insignia. The female skeleton, it may be remarked, belonged to an old person, and in this point, as also in the possession of cruciform fibulæ (see Plate XXV. fig. 7), instead of circular ones, this skeleton differed from the two others with which we have compared it. It was chiefly from a comparison of the female Anglo-Saxon skull figured in Plate XXIV. fig. 5, with the first cranium described by me as "cranium (male) marked A" for Mr. Akerman in his Report in the Proceedings of the Society of Antiquaries, May 25, 1865, that I came to see that my assignment of this latter to the male sex had been in all probability erroneous. This cranium was reported as having been found with a fibula two feet above it, and though this by no means proves it to be an Anglo-Saxon skull from the archæological point of view, the very close anatomical approximation of this skull to the indubitably Anglo-Saxon skull figured in Plate XXIV. fig. 5 does, when coupled with this fact, lend some considerable probability to such a conclusion. In justice to myself, I may be permitted to say that the cranium and lower jaw were the only bony relics upon which I had to form my judgment as to sex, and that in my report I did draw attention to the small development of size and strength which they seemed to show that their owner must have possessed. And the authority of anatomists of no less repute than His and Rütimeyer,[a] Welcker[b] and Ecker,[c] may be adduced to show that it is by no means always possible to decide the ques-

v.) Both had belonged to young men. In both the body had been buried with the head raised; and in one the grave, though semioriented, was only 18 inches deep, and the arm lay across the body, and not by the side, as in the burials of Latinized populations (see Cochet, *Normand. Souterr.* p. 193). There were no relics, and we have not therefore more than probable evidence for their nationality.

[a] *Crania Helvetica*, pp. 8 and 9.

[b] *Archiv für Anthropologie*, i. 1, p. 127.

[b] *Ibid.* ii. 1, p. 110.

tion of the sex of a cranium in the absence of the pelvis and other bones. It is interesting to remark that a very similar female cranium was found by the Rev. George Cardew in a Romano-British cemetery at Helmingham under circumstances such as that of having the head raised, which makes it probable that the skull may have differed as much ethnologically as it does anatomically from the skulls of the Romanized Celts, amongst whom it, as also another cranium supposed not to have been Celtic, was found. This cranium has been presented to the University Museum by the Rev. G. Cardew, and has been carefully measured and compared with other skulls supposed or known to have belonged to Anglo-Saxons. Two smallish brachycephalic or sub-brachycephalic and prognathic crania, one of which belonged to an old (No. xiv. Jan. 15, 1868) and the other to a young woman (No. x. March 17, 1868), and neither of which has any other than osteological evidence attached to it for the decision, I am inclined upon this evidence to think may have been Anglo-Saxons of the type of the two female crania just spoken of. The younger of these two women's skulls was found with the cervical vertebræ impacted between the rami of its lower jaw, and in this, as in many other particulars, resembles the female Anglo-Saxon skull from Brighthampton, to be seen catalogued as No. 5,712 D, in the College of Surgeons.

Among the entire series, besides some fourteen crania, or parts more or less fragmentary of crania, and other bones, which speak to the existence of a distinct interment without making it possible to refer the remains certainly to a distinct type, there are some four or five crania which bear a considerable resemblance to crania of what is perhaps the most common modern English type. The frontal region, without attaining any very extraordinary development, nor exceeding either in vertical or transverse diameter the frontal regions of the larger specimens of brachycephalic British skulls, is, nevertheless, possessed of more equable proportions relatively to the other regions of the cranium than the great majority of ancient crania.[b] And in consequence, to some extent, of this, the entire calvarium shows a more evenly ovoidal contour than the skulls composing the rest of this series. These crania were found in graves in which no relics, except in one instance a nail, were found, and which ran in the ordinary semi-oriented Romano-British direction. And, so far as the brain case is concerned, these crania might be looked upon as embodying the result of intermarriages of the broader "Sion" type with the narrow "Hohberg" type, and corresponding with

[b] See Broca, *Sur la Capacité des Crânes Parisiens*, Bull. Soc. Anth. de Paris, tom. iii. 113, 1862.

the "Misch-Form" spoken of by His at p. 49 of the *Crania Helvetica*. And they might perhaps be considered as representing the inevitable result of the settlement of a large Roman immigration in the midst of a dolichocephalic Celtic people. But inasmuch as these crania show a not inconsiderable tendency to prognathism, and resemble herein the Anglo-Saxon, and differ from the Romano-British series, I incline to think they may have belonged to Christianized Anglo-Saxons who died before the churchyard had superseded the cemetery, but after the custom of burial with insignia had given way to the urgency by the which its anti-Christian character may have been represented to the convert. The hypothesis of poverty will account for the absence of relics, but I do not incline to accept it here, partly on account of the presence of a nail, which may seem to imply the employment of a coffin in one of the interments, and partly on account of the resemblance which these skulls show to the male Anglo-Saxon cranium (No. 36, Researches at Long Wittenham, *Archæologia*, vol. xxxviii.) and to a female Anglo Saxon cranium obtained for me by the kindness of the Rev. R. Taylor, from the Kemble Cemetery, described by Mr. Akerman in the *Archæologia*, 1856, vol. xxxvii. in neither of which cases have we reason to suspect the existence of straitened means.

The name of Magnus Maximus, the Maxen-lwedig of the Mabinogion, forbids us to think that in the days of Gratian there could have been, either in modes of life or in modes of burial, much difference between a Roman and a Romano-Briton. Tenants of leaden coffins must, from the expensive character of their interment, have been persons of distinction, such as were the "Equites"[a] under the Roman empire; but Roman citizenship no more implied Roman blood in the days of Ambrose than it did in those of St. Paul. The *Notitia*,[b] indeed, informs us that races, such as the Tungrians, Dacians, Moors, Cilicians, and Dalmatians, as well as Spaniards, Gauls and Germans, were employed by the imperial policy to hold Britain at the foot of Rome.

But if it is at all possible to separate and distinguish, when one is treating of the times of Maximus, between a Romano-British and a Roman interment, it may be possible to do so in such cases as those of the two interments in leaden coffins already described. The tenants of these coffins must at least have been persons of wealth, and in the enjoyment during their lifetime of

[a] See Kemble's *Saxons in England*, ii. 272; Pearson's *History of England*, i. 45; Coote's *Neglected Fact in English History*, pp. 40, 45.

[b] See *Roman City of Uriconium*, by J. Corbet Anderson, Esq. p. 129; and Holder, *Archiv für Anthropologie*, ii. i. 88, Taylor, *Words and Places*, p. 284, *ibique citata*.

all the distinctive characteristics which still remained attached to the title *Civis Romanus*. It is true that coins were found with the one and not with the other of these two skeletons, but in all other particulars attending their sepulture they seem to have very closely resembled each other. But when we come to compare their crania we find that while that of the skeleton found with coins is of an elegantly vaulted and lofty form, that of the other is low, broad, and globose. Professor His would speak of the one as belonging to his "Hohberg," and of the other as belonging to his "Sion" *typus*. The skull of the former differs but little, and that chiefly in the way of refinement, from the elongated and vaulted crania procured from British barrows of a pre-Roman period, such as the long barrow at Netherswell, near Stow-on-the-Wold, calvaria from which I have side by side with that of this Roman from the leaden coffin as I write; the skull of the latter is as broad and low as another equally authentic "Roman" cranium of about the same period, figured by Professor Ecker at pl. xx. of his *Crania Germaniæ*. So far, then, as these crania bear upon the argumentation as to whether the Roman skull was an elongated and vaulted, or an elongated and broad and flat skull, we may at first sight be tempted to rest in the conclusion that both types were equally and alike found in the imperial race. I believe, however, that it is possible to show that we should be wrong in considering with Professor His[a] that the former of these types, which he has also spoken of as the aristocratic type of head, is really the Roman skull *par excellence*. First, as it seems to me, the Romans themselves considered theirs to be a broad rather than a lofty-headed race. In looking at Roman monuments as reproduced for us in such works as Lindenschmit's *Alterthümer unserer heidnischen Vorzeit*, we cannot fail to be struck by the great angle at which the ears stand out from the head; and this feature, a very striking and obvious one, is, as observation on living "eurycephalic" persons will show, correlated with a globose and bossy rather than with a vertically-walled and narrow temporo-parietal region. The engraving of the beautiful monument to Manlius Cœlius, an officer in the army of Varus, given at heft vi. taf. v. of Lindenschmit's work, just referred to, shows this peculiarity in the attachment of the external *concha* of the ear in each of three heads it represents; and much the same may be said of the figures given heft iv. taf. vi., heft ix. taf iv. and especially of the uppermost of the two

[a] *Arch. für Anthrop.* i. 1, p. 70. *Crania Helvetica*, p. 38, one of the Hohberg type skulls is supposed by the authors to have come from a cemetery the graves in which were oriented, and contained swords and spear-heads as well as coins. This however does not prove that they belonged to *Roman* soldiers, but rather the contrary. See *Cran. Helv.* p. 21, note.

figures in heft viii. taf. vi. Busts also of the Roman emperors and of other Romans which are recognised as more or less authentic speak to the same effect. Secondly, we do find the broad and flat form of cranium very commonly in cemeteries of undoubted Roman character in England, and the arched and centrally ridged and narrow cranium we do find in as undoubtedly British barrows. A skull, most singularly resembling one of my globose platycephalic crania from Frilford, was recently shown me by Canon Greenwell from a cemetery at Margate, where it had been found with Roman pottery, whilst the "Hohberg" type of skull is the very form which Retzius describes as the less common Celtic form, and calls, for the sake of distinguishing it, by the name "Belgic."[a] Thirdly, through the kindness of Thomas Combe, Esq., M.A. of Oxford, I have had put into my hands, and into the Oxford Museum, a skull, "found in excavating a house of the time of the Roman Republic, discovered below a vineyard, near the baths of Caracalla, on the Via Appia," and this skull, though it belonged to a person of not more than between twelve and fourteen years of age, enables me to understand how the modern Italian anthropologist Maggiorani speaks of the ancient Roman skull as a long but broad skull, oblong and four-cornered, with broad interparietal and broad frontal regions. But I must say that the skull from the leaden coffins, of which I am speaking, as also a more or less authentic bust of Julius Cæsar, and such works of art as the Roman figured in Lindenschmit's *Alterthümer*, heft vii. taf. v. have convinced me that too much weight may be laid upon breadth of forehead. In these heads the broad character which they present does not depend upon the frontal but upon the parietal region, and the vertical view of the cranium presents very much such an outline from back to front as the broad side of the flint axes or celts, so familiar to antiquaries, presents from front to back. The head of the first Napoleon must have presented such a contour when viewed from above; and I believe, in spite of our tendency to connect a narrow forehead with foolishness, that a truer analysis would connect it in many cases merely with premature closure of the frontal suture, which seems hereditary in some families. This premature closing is consistent with the possession of a large cerebrum, and of great mental powers, and we cannot arrogate for it any ethnological significance, at all events in cultured races.

His and Rütimeyer (*Crania Helvetica*, p. 34), hold that their "Sion" type of cranium, which seems to me to be represented by the broad, flattish, globosely contoured skulls, of which I have just been speaking, was the type of skull

[a] *Ethnologische Schriften*, p. 108.

possessed by the Helvetii, their "Celtic forefathers," and by the inhabitants of their Pfahlbauten. And, as there is evidence to show that this same form of skull existed in pre-Roman times even in these islands, we must not suppose that the flatter and more globose skulls which we find at Frilford belonged exclusively to Roman immigrants, or to immigrants from Southern Europe, who may have been commanding as officers, or settled as upper-class *decuriones* or *equites* in the neighbourhood of this cemetery. The loftier and narrower crania, however, may with less hesitation be supposed to have belonged to men of similar station, but of British birth and blood, who had acquiesced in Roman rule, and identified themselves with Roman institutions.

Differing in the particulars specified, the osteological remains of the two occupiers of leaden coffins do nevertheless present certain important points of resemblance. Both belonged to men who were beyond the middle period of life, who were possessed of great muscular strength, but whose skulls, teeth, and jaws seem to show that they had the command of the comforts of civilization. Whilst the skulls in both cases present the appearances of refinement, the other bones of the skeleton are much roughened by the development upon them on the one hand of ridges for the insertion and origin of muscles, and on the other of rheumatic (?) exostoses. And these same bones show, in the one case, with considerable probability, and the other with absolute certainty, that their owner had been exposed, or exposed himself, to personal injury and violence, and had, probably, been a soldier of much service in the stormy times to which, in one case, the antiquarian relics enable us to assign his remains with perfect certainty. The left collar-bone belonging to the skull of the more globose and flatter outlines had undergone and repaired a comminuted fracture during life, and the left metatarsal of the second toe of the foot of the same side, a bone but rarely broken, had been broken, though less severely, than the collar bone, and had, like it, been repaired during life. A fall from a horse may break a collar-bone, but injuries such as war entails are suggested to us by a history like this. The other skull, which was found with five coins, and which I have said may probably be looked upon as having been produced by the action of Roman influences upon the more roughly-hewn dolichocephalic Britons, was found in company with a left first rib, which had anchylosed with its ossified costal cartilage, which again, like the clavicle just above it, had its sternal articular end greatly enlarged. It is possible that these peculiarities may have been the result of exostotic disease, of which the other bones bear evidence, though less marked evidence than the bones of the other skeleton with which we are comparing them; but for the reason conveyed in

these last words, as also because the abnormal appearances are not repeated on the opposite side, I incline to ascribe them to the working of some mechanical injury inflicted, possibly, in war, and certainly many years before death. The owner of this skull had lost, and was at the time of his death losing, teeth by caries,[a] and was suffering and had suffered from exostosis in sympathy with it; the owner of the other had lost two of the molars of the right side of the lower jaw early in life, and the molars of the corresponding side in the upper jaw are little worn and suggestive of youth till we look at the other side. The lower jaw in the former of the two skulls is very well formed; in the latter it is comparatively feeble, especially in the region of the chin; the teeth in both are less worn than the age testified to by the rest of their skeletons would have led us to expect. The occupiers of these coffins were both tall men; the stature of the man found with the coins must have been nearly five feet eleven inches, that of the other nearly six feet. A skeleton of an old man, the skull of which closely resembles that of the former of these (see *Catalogue*, *infra*, No. xiv. May 1867), and which bears less ambiguous marks of its owner having been a warrior in the gaping, though healed, wound on its left side, belonged, as its femur of 19·5 inches length shows, to a man of fully six feet in height. The stature of each of these three warriors was much above that of the average Roman of ancient days, who spoke of the Germanic and Celtic races as possessing *immania ac procera corpora*, as it is also above that of his modern Italian representative,[b] and above that of the Long Barrow British skeletons.[c] The better food of civilization may have increased the stature of the former of the two occupiers of the leaden coffins, and of the owner of the beautifully elegant and vaulted cranium (No. xiv. May 1867); whilst intercrossing would account for the increase in height in the skeleton to which the flatter skull belonged, if, with Edwards, Cardinal Wiseman,[d] Sandifort, and Ecker, we should consider it to be probably Roman.

The craniography of the occupiers of the graves which I have spoken of as Romano-British or British, and which the archæological evidence above adduced shows to have belonged to the times of the later Roman empire, is a subject of considerably greater difficulty than that of the Anglo-Saxon and of the leaden

[a] For an interesting history of dental caries, as observed in the ancient inhabitants of Britain, see a paper by J. R. Mummery, esq. *Trans. Odont. Society*, 1869.

[b] See Edwards, *Des Caractères Physiologiques des Races Humaines*, p. 53. See Keysler, *l.c.* p. 220, for the stature of the ancient races under comparison, *ibique citata*.

[c] See Thurnam, *op. cit.* pp. 40-41.

[d] *Lectures on the Connexion between Science and Revealed Religion*, p. 152, *cit.* Nott and Gliddon, *Indigenous Races*, pp. 311, 312.

coffin interments. An examination of fifty-three of these interments, and a comparison, carried on at great cost of time, of their contents with those of several other cemeteries, has conducted me to the following conclusions as to the tribal characters of the pre-Saxon inhabitants of this district with whom I have had to deal. In the first place, I have not in my excavations at Frilford met with any representatives of the brachycephalic type of ancient Britons so well described by Dr. Thurnam,[a] and called "Belgic" by Professor Huxley. This is especially noteworthy, as typical examples of this form of cranium have been, through the kindness of the Duke of Marlborough, procured by me for the University Museum from the long barrow at Crawley, described by Mr. Akerman, in the *Archæologia*, xxxvii. 432, and supposed by him to belong to the same period in time, as it does to much the same district in space, as the Frilford cemetery. Secondly, the longer, narrower, and more vaulted skulls, supposed to have distinguished a race which in England at least took the priority in point of time of the brachycephalic and taller race just mentioned, are, in what I should consider their most typical form, all but equally absent here. That most typical form I should consider as identical with the form regarded as "Belgic" by Retzius,[b] and spoken of by him as "a Celtic but not the common Celtic form;" and the form called "Cumbecephalic" by Professor Daniel Wilson[c] I should regard as being but a slight modification of it. And the three skulls which I have classed in my Tabular view of results of Osteological Investigations (*infra*) as belonging to the "Hohberg" *typus* of His and Rütimeyer, may be looked upon as embodying the results of the working upon that form of the Roman civilization with which their owners were in contact. Those results are expressed by a decrease in the angularity of the external outlines, and an increase in the cubic capacity indicated in a few cases very strikingly by an open frontal suture; see p. 450, *supra*. Thirdly, a very large majority, viz. thirty-two out of the fifty-three adult Romano-British interments investigated by me, belong to a type which has frequently been confounded, since the time of Retzius' writings, with the dolichocephalic types just spoken of, but which that excellent ethnographer distinguished from it as "Cimbric," a variety of "the common Celtic" type. Comparing this form of cranium, which I may add is by no means

[a] *On Two principal Forms of Ancient British and Gaulish Skulls*, pp. 31 and 101. Skulls of this form are considered by Sir Thomas Wilde to have belonged in Ireland to fair-headed, light-coloured, blue, or grey-eyed Celtæ, or Tuatha De Danaan. See *Beauties of the Boyne*, 2nd ed. 1850, pp. 221, 237, 239, and the figure at p. 232.

[b] See *Ethnologische Schriften*, p. 107, 108.

[c] *Prehistoric Annals of Scotland*, chap. ix. 1851.

extinct amongst ourselves at the present day, with the elongated but narrow form which he supposes to have belonged to the "Belgæ," Retzius speaks first of "the common Celtic form," and says it differs from the "Belgic," in being less narrow and compressed. The Cimbric variety, he adds, which is found in South Sweden and Denmark, is even somewhat broader still; is very like the Scandinavian Gothic form, and is of an elongated oval shape, with a greatly developed occipital region. And Retzius has, by the gift of a "plaster cast of the cranium of an ancient aboriginal of Scandinavia regarded as the Celt" to the easily accessible and invaluable ethnological series in the London College of Surgeons,[a] enabled us to understand most unambiguously what was the type of skull to which he alluded. To this type, most assuredly, the large majority of the adult Romano-British crania found in this cemetery are referrible. And I may here say that a skull obtained by me, with many others, from a barrow at Dinnington, near Rotherham, in South Yorkshire, of which casts have been made and presented to various museums in this and other countries by Dr. Thurnam, corresponds very closely with this cast presented to the College of Surgeons by Professor Retzius, and more closely still with some of the very fine skulls obtained by me from Frilford. Professor Ecker, in writing of this cast,[b] observes, apparently without having Retzius' comparison above quoted of such skulls to the Scandinavian Gothic type before his mind, that it resembles the skulls he has described as "Grave Row," "Reihen-Gräber" skulls, and assigned to the ancient Germanic and modern Swedish peoples. Very similar skulls, again, I have obtained from Romano-British cemeteries of the later times of the Empire, as testified to by archæological evidence, at Long Wittenham, in Berkshire, through the kindness of the Rev. J. C. Clutterbuck; from Helmingham, in Suffolk, through the agency of the Rev. G. Cardew, and from Towyn-y-Capel, Holyhead, by that of the Hon. W. O. Stanley. The ancient British skull from a cist at Winterborne Monkton, North Wilts, figured by Dr. Thurnam, *Crania Britannica*, Plate 58, is closely similar in contour and proportions, as taken by measurement, to the variety of which I am here treating. The osteological peculiarities of this "elongated oval Romano-British type," as seen at Frilford, shew us that we have to deal, there at least, with *times of civilization*. For civilization differs from heathendom in nothing more markedly to the eye of the craniologist than in the age to which persons who have lived under its influences attain; and the long

[a] See *Catalogue*, Osteological Series, ii. 880, Prep. 5709.

[b] *Archiv für Anthropologie*, i. 2, p. 283. As Professor Ecker considers his *Reihengräberform* to correspond with the "Hohberg" type of His and Rütimeyer, it would appear that he would consider this cast as belonging to that class from which, however, its cubic capacity differentiates it.

skulls of which I am now speaking differ very strikingly from the long and narrow skulls described by Dr. Thurnam in this very particular, that in very many cases they belonged to very aged individuals.[a] The greater average stature of this variety of Celt (5 feet 8 inches as against 5 feet 6 inches of the older form,) may perhaps be in like manner ascribed to the greater civilization and command of the means of sustenance which we know them to have possessed. I have referred eleven female skulls to this type as against twenty-one male; the female skulls in many cases approaching very closely to the proportions of the medium-sized male skulls.[b] A much greater difference, on the other hand—viz., as much as 8·5 inches, judging from the average approximatively obtained from the measurement of the long bones of ten women referred to this type—appears to have existed between the statures of either sex in this type than exists between the statures of modern[c] English men and women. It may be said that the estimation of the stature by the various methods which take one or more of the long bones as their standard, is amenable always to several sources of fallacy, and more especially in the case of female skeletons; but in savage races[d] at the present day an average difference nearly equal to that just given, as deduced from my measurements, has been observed to exist between the statures of the two sexes. And though the Romano-Britons must be considered to have been a civilised population, it must be borne in mind that the physical comfort, upon which such matters as stature depend, of their times was something very different from that of ours, when coal and glass[e] are more or less within the reach of the poorest settled inhabitants of our country. The greater relative stature of the males of this variety of the

[a] See Dr. Thurnam, *op. cit.* p. 60.

[b] Huschke, *Schädel, Hirn, und Seele*, p. 48; Holder, *Arch. für Anthropologie*, ii. 1, p. 55.

[c] The average height of 295 adult male patients examined in the Somerset County Lunatic Asylum by Dr. Boyd, and recorded by him in the *Philosophical Transactions* for 1861, p. 261, varied from 67·8 to 65 inches; that of 233 females from 63·2 to 61·6 inches. The average height of the modern German male is given by Vierordt in his *Grundriss der Physiologie*, 2nd ed. p. 460, as 172 centimètres (5 feet 3½ inches); that of the German female as 164 (5 feet 2½ inches). In the long barrow explored by Dr. Thurnam (*l.c.* p. 27) at Tilshead, three male skeletons varied in length from 5 feet 5 inches to 5 feet 8 inches, and three female skeletons from 4 feet 9 inches to 5 feet 3 inches. The average height of the dolichocephalic men from megalithic and other long barrows is given by the same author (*l.c.* pp. 40, 41) as 5 feet 5 inches as against 5 feet 9 inches for the brachycephalic men from circular barrows.

[d] Sir Andrew Smith, K.C.B. has kindly informed me that he can safely state from extensive observation made during 17 years' residence in South Africa, that the Amakosa Kaffirs, to the eastward of the Colony, average, men 5 feet 8½ inches, women 5 feet 1½ inch.

[e] For introduction of panes of glass, or at least of the manufacturers of them, into England in 680 A.D., see Wylie, *Fairford Graves*, p. 17, and *per contra* Corbet Anderson, *Uriconium* 1867, p. 69, *ibique citata*.

Romanised Celt may perhaps be accounted for by their having been more exposed to and invigorated by the influences of an out-of-door life; whilst the stature of the females, which is so disproportionately smaller as compared with modern ratios, may have been due to their spending their lives inside houses which, if light must have been cold, if warm must have been dark—which had no chimneys, and only in the case of the rich, hypocausts, and even in their case probably no glass.

Fourthly, a second form of cranium differing from the one just described is found with similar archæological surroundings. It resembles this form in its noble proportions and indications of culture; it equals or exceeds it in length, and is distinguished from it by its greater breadth, and, whilst considering it to correspond to the "Sion Typus" of His and Rutimeyer, I have spoken of it in my catalogue and tables as the "globose Romano-British" type. A very large proportion, six out of the eleven female crania, and seven out of the ten male crania, referred by me to this type, belonged to persons of considerable age. The men attained an average stature of 5 feet 8·5 inches. The crania and the other bones of this variety of men enjoying Romano-British civilisation, have resisted the ravages of time better than those of the other form. There is no reason, however, for supposing that this valuable peculiarity is referable to any conditions not intrinsic to the bones themselves. The mode of their sepulture is identical with that of the other form, and one of the best marked specimens of the type in question was taken from a grave over which an Anglo-Saxon urn containing the burnt bones of an adult was found. The larger skulls in this series belonged in all but one instance to men of a stature little, or not at all, short of six feet, and this large stature must not be forgotten when we admire the large size of their brain-case. Only one female skull, which at all approximates in size to these larger crania, has come into my hands at Frilford; and this skull belonged to a woman of little, if at all, more than five feet one inch in height. But I incline to think that the female crania, seven in number, which I have spoken of as "the River-bed type modified by increase of size," and which constitute in the tabular view to which I allude a third variety of the Romano-British series, with an average stature of four feet nine inches and a-half, are to be considered as the female representatives of the "globose Romano-British type." For, strikingly similar as the contour of these skulls is to that assigned by Professor Huxley[a] to his "River-bed skulls" their capacity exceeds that of those crania, and their measurements come to correspond very closely with those of the smaller male skulls belonging to

[a] See *Prehistoric Remains of Caithness*, p. 120.

individuals of smaller stature of the globose Romano-British type, whilst in their solid texture they resemble the larger skulls of that division.

Fac-similes of these female crania have been procured from many excavations in this country. I have found them in the "Long Barrow" at Crawley, which has been already spoken of as containing skeletons with crania of the brachycephalic British type, and which, it should be added, has furnished us with evidence as to female skulls corresponding to the large brachycephalic male skulls, and differing, therefore, considerably from every variety of the River-bed type. A skull very closely similar to this Frilford variety of pre-Saxon times may be seen in the museum of the London College of Surgeons, under the number "5712 R" in the Catalogue, and with the title "Peat skull." And, lastly, a modern female skull obtained for me by Dyce Duckworth, Esq., M.D., from the Hinter-Rhein-Thal, near the Splügen Pass, the country of the "Disentis" type of the Swiss anatomists, would have shown me, had other evidence been wanting, that this form of cranium has persisted into, and is abundant in, our own day.

A modification of the River-bed type is presented to us in certain small crania to which I have applied the term "cylindrocephalic." In this form represented by two female and undoubtedly pre-Saxon crania (No. ii. Sept. 1867, and No. iv. Jan. 1868,) the frontal and parietal tuberosities are nearly or quite obsolete, and the calvarium, elongating as if in compensation, becomes somewhat cylindroidal in its antero-posterior outline.

Only one male cranium has been found by me at Frilford which I should class with the River-bed male skull from Muskham, and the Towyn-y-Capel skulls so intelligibly described by Prof. Huxley in the *Prehistoric Remains of Caithness*, p. 120, and frequently examined by myself in the Museum of the College of Surgeons. This cranium belonged to a strong man of six feet, beyond the middle period of life, who seems, from the direction of his grave, and the copper staining upon his somewhat prognathic jaws and collar bone, to have been acknowledged as a Romano-Briton, and to have been buried just as individuals whose osteological remains speak with some authority to their greater culture. By the possession of a slightly greater breadth, and consequently a much higher cephalic index, 78 as against 76 of the typical male River-bed skull just specified, this skull shows a tendency towards assuming the outlines of the smaller representatives of the globose Romano-British type. The fact that but one male against nine female skulls of the River-bed type has been found at Frilford amidst so many other types of head, and so many marks of civilization, is suggestive of the explanation which their having belonged to a slave population

would more or less satisfactorily give. The River-bed skulls from the barrow at Crawley which have come into my hands are also all female, as I think, but this barrow has by no means been exhaustively explored. And I incline, though doubtfully, not having had the pelvis nor the long bones to aid me in forming my judgment, to refer the Towyn-y-Capel skulls in the College of Surgeons to the same sex as all the similarly-constructed crania, except the one just mentioned, found at Frilford. In the large male skulls, of which I have spoken, Professors Rütimeyer and His would, I think, recognise their "Sion typus;" and assuredly they merit the titles of *Kräftigkeit* and *Würde*, which Rütimeyer[a] bestows upon them. It may be right to hold that these crania belonged to men British in blood, though here at least Roman by citizenship; but, if we assign them to the Roman immigrants, we shall have an explanation of the enlargement of the River-bed type of skull suggested to us at once in the very probable hypothesis of intermarriages taking place between foreigners and the, possibly aboriginal, inhabitants of the country, who may have been actually slaves, but must certainly have been in a lower state of civilization. And in this hypothesis the paucity of male River-bed skulls would also find an explanation.

The Roman immigrants had all but certainly a preponderating proportion of males amongst them, and it would be natural to suppose that the same disproportion prevailed similarly among the swarms of the less settled, less civilised, Saxons. But I am bound to say that the craniological evidence before me leads me to think that the reverse of this very reasonable anticipation was what actually took place, at all events here; for the crania found buried with the Anglo-Saxon insignia of the female sex are most distinctly different, both as to signs of culture, and as to type and contour, from the crania which belonged to the Romano-British women exhumed here. I do not think these Rowenas with somewhat prognathic jaws, and small unhandsomely contoured calvaria, could have been "exceedingly fair and goodly to look upon;" and I am certain that Martial, though he may not have been a physiognomist, would never have said of these Saxon females what he said of the British lady, Claudia Rufina,[b] that she might have been taken by a Roman matron for one of her own countrywomen.

[a] *Jahrbuch der Schweizer Alpen* for 1864, p. 398.

[b] Claudia cœruleis quum sit Rufina Britannis
Edita, quam Latiæ pectora plebis habet—
Quale decus formæ, Romanam credere matres
Italides possunt.—xi. 53.

M. Serres, on the other hand, appears[a] to have convinced himself that in the Merovingian cemetery of Londinières the males belonged to the Scandinavian and the females to the Celtic race. And, upon the general considerations which have been very clearly and convincingly put forward by Professor Pearson[b] and by Mr. L. O. Pike,[c] I should be inclined to think that wholesale massacres of the conquered Romano-Britons were rare, and that wholesale importations of Anglo-Saxon women were not much more frequent. Still Anderida was levelled with the ground, and its women and children, as well as its male inhabitants, were put to the sword. And where the obstinate resistance of the inhabitants may not have provoked the invaders into cruelty, which would have been unnatural, even in the notoriously cruel Saxon (see Salvian, *cit.* Kingsley, *Roman and Teuton*, p. 46), the civilization of the former may very well have attained to such a level as to make them think a retreat into Damnonia preferable to remaining on the same spot with a race so destitute, as the Saxons were, both of the means and appliances of the arts and manufactures which make this life enjoyable, and of the beliefs which make the prospect of another comforting. At Frilford the relics of Roman manufacture, as well as other remains, show, as I have said, that a population must have existed there previously to the Saxon invasion, which was in the possession of a very considerable share of the material and other elements of the civilization of that period. The very name of this Romanized settlement has been lost, and the Saxon name Frilford, like that of Garford, a village a few hundred yards distant, may possibly speak, as the Rev. Isaac Taylor, in his *Names and Places*, has suggested with reference to Gateshead,[d] to the destruction of a bridge by the worshippers of Frea. The name, indeed, seems to point to the same explanation as the great number of urns; and to suggest that the very real heathenism of the soldiers of Cerdic may have driven away a population who might have acquiesced in submission to such professed Christians as the soldiers of Clovis exhumed at Londinières. Such a story as that which Bede tells us[e] of the refusal of the British priests to eat in company with the Saxons, even in his time, enables us to understand in what abhorrence the Christians must have held them in the days

[a] Cochet, *Normandie Souterraine*, p. 188, ed. i.; *Comptes Rendus*, xxxvii. p. 518; *L'Athenæum Français*, Oct. 22, 1853, p. 1013.

[b] *Op. cit.* p. 100.

[c] *The English and their Origin*, pp. 59, *et seqq.*

[d] See p. 266, 267. Gateshead, however, may mean *Capræ Caput*. See Bede *H. E.* iii. 21.

[e] H. E. ii. 4, ii. 20.

of cremation.[a] Some Lloegrians, as the Triads tell us,[b] "became as Saxons;" but many of the Celtic tribes, as their poems show us, preferred emigration to submission and coalescence. The large Romanized towns, no doubt, made terms with the Saxons, who abhorred city life,[c] and who would probably be content to leave the unwarlike burghers in a condition of heavily-taxed submissiveness. The villages would be more exposed to the violence and lawlessness of hordes made insolent by conquest than the large towns; and I am inclined to think that where we find Roman remains succeeded by relics of the Anglo-Saxon cremation period, on a locality which now bears an Anglo-Saxon name, emigration or extirpation of a Christian population may have very often entered into the now irrecoverable history of the locality.

I further suspect that the heathenism of the Anglo-Saxon domination during the hundred and fifty years[d] which elapsed between the time of Hengist and that of Augustine is one and not an unimportant factor in the complex aggregation of conditions which has given us the Germanic language which we speak. Whilst and where heathenism reigned supreme, the performance of the Church services would doubtless cease; and in an age of few books, and those in manuscript, and in a country which, with whatever centres of civilization and population, was, after all, but thinly peopled, it is easy to understand how the language of the vanquished succumbed in three or four generations to that of the victors, whose relics speak to their great numbers being so ubiquitously scattered over England. Even in France, where the Merovingians allowed every citizen to declare what law, Frank or Roman, he would live under, and where the priests used the Theodosian code, and so put the Germanic idiom at a disadvantage, it was still employed by the kings and nobles even in the Carlovingian period.[e] On the other

[a] See also *Crania Britannica*, p. 184, vol. i. and pl. xx. p. 3.

[b] Pike, *op. cit.* p. 46.

[c] *See* Pearson, *op. cit.* p. 264.

[d] Professor Pearson, *History of England*, i. 101, suggests that the long duration of the struggle may have caused the victory of the Saxon Language, by allowing of the perpetual fresh arrivals of German speaking invaders.

[e] See Gibbon, *Decline and Fall*, ed. 1838, vi. 118, 351, 376, chap. 38, viii. 156. For an instance of the power obtained and exercised by the Christian Ministers, see Fleury, *Eccl. Hist.* viii. 34, 50, of the Council of Macon. Fleury in his small work, *Essays on Ecclesiastical History*, tells us, p. 203, English Transl. 1721, that the Goths, Franks, and other German people dispersed into several parts of the Roman Provinces, were so few in comparison with the ancient inhabitants that it was not thought necessary to change the language of the Church on their account. On the other hand, Bede tells us, that in his time God was served in five several languages in Britain, namely, Anglorum, Britonum, Scotorum, Pictorum, et Latinorum. See also Taylor, *Words and Places*, 1864, p. 151; Lingard, *Hist. A.-S. Church*, i. 307.

hand, during my somewhat considerable practice in the way of exhuming Saxons, and my gradual familiarization with the two facts of their great aptness at destroying and of their great slowness in elaborating material civilization, a doubt has little by little grown up in my mind as to the extent of the debt which we are so commonly supposed to owe to our Anglo-Saxon conquerors. That they conquered a much divided and not very numerous Romanized population of Christians, and overrun the greater part, if not the whole, of England Proper whilst yet heathens, and within the comparatively short space of time during which they remained such, proves, of course, that the Saxons were superior to the Britons in the arts of war as it was then understood and carried on. But though war in our days is very intimately dependent upon the arts of peace, proficiency in the one set of accomplishments was by no means so correlated with proficiency in the other fourteen hundred years ago. And though my investigations have made me a very firm believer in the reality of the Saxon "man and steel, the soldier and his sword," they have not revealed to me any convincing evidence of the importation into this country by these invaders of any such distinctive civilization as the language often held as to our "old Teutonic constitution," or "the landing of Hengist in Thanet having been the birthday of English liberty," would seem to pre-suppose. Civilization and culture are not wholly dependent upon material conditions, but I apprehend they cannot exist without giving us some material and tangible evidence of their existence, at all events *secundum statum præsentem*, of a very different kind from what we find in pre-Augustinian Anglo-Saxon interments in England. Mr. Merivale's dictum[a] to the effect that "it may appear that moral culture is almost altogether independent of material progress," is too much out of keeping with the ordinarily-accepted views of the way in which the external world works upon human nature, *curis acuens mortalia corda*, to need discussion at length; and when Professor Pearson[b] says "it would be unjust to judge the Teutonic tribes of the fifth century by the low development of the mechanical arts among them," we expect to have evidence of some other arts and pursuits having somehow or other attained to a compensatory high development amongst these races at that time. Guizot,[c] it is well known, has compared the social and political condition of the Germanic races at this period of their history to that

[a] *Conversion of the Northern Nations*, p. 186.

[b] See, however, his *History of England*, pp. 44, 51, 103, 112, 130, 264. The high development of the pictorial art to which Professor Westwood's magnificent work, recently (1868) published, speaks, belongs to Christianized, and therefore as little to "unalloyed Saxondom" as do Cædmon, Bede, or Alcuin.

[c] *Hist. Civ. Franc.* lect. vii. tom. i. cit. Merivale, *ubi supra*, note G, p. 185.

of the Red Indians; and when we find Sharon Turner, the historian of the Anglo-Saxons, telling us[a] that Ethelbert, after his conversion by Augustine, "became distinguished as the author of the first written Saxon laws which have descended to us, or which are known to have been established, an important national benefit for which he may have been indebted to his Christian teachers, as there is no evidence that the Saxons wrote any compositions before," we may be inclined to think that the views of Guizot are nearer to the truth than those of Ozanam,[b] Greenwood, and Rogge.

We have historical, literary, archæological, and anatomical evidence for saying that two or more distinct varieties of men existed both in England and France, both previously to and during the periods of the Roman and of the Teutonic invasions and dominations.[c] The earliest Welsh traditions, Professor Pearson informs me, speak "of the social races inhabiting Britain, the Kymry, the Lloegrwys, and the Brythons," all descended from the Kymry. The word "Kymry" itself, however, has been supposed, like the words "Frank" and "Aleman," to denote social or confederative, rather than genealogical, community; and, though we are warned thus *in limine* against any premature attempt

[a] *History of the Anglo-Saxons*, i. 332. See also Taylor, *Words and Places*, p. 339, and *per contra*, Kemble, on Runes, *Archæologia*, xxviii.

[b] Ozanam, however, *cit. Merivale*, *l.c.* 187, says, "Les lois de l'ancienne Germanie ne nous sont connues que par les témoignages incomplets des anciens, par la reduction tardive des codes barbares, par les coûtumes du moyen age. Il y reste donc beaucoup de contradictions, d'incertitudes, et de lacunes." Gibbon may be shown to be similarly self-contradictory by a comparison *inter se* of the following passages; vol. i. chap. ix. p. 362, ed. Milman, 1838; vol. vi. chap. xxxviii. p. 325; vol. v. chap. xxxi. p. 317. The stories told of the two Gothic Princes in the two latter passages are quite inconsistent with the statement contained in the first of the three, to the effect that "in the rude institutions of the barbarians of the woods of Germany, we may still distinguish the original principles of our present laws and manners." See Finlason's Introduction to Reeves' *History of the English Law*, 1869, p. xl.; and Professor Pearson's *Historical Maps*, 1869, where at p. vii. the Professor speaks of the Saxon invaders as consisting of "a few boat-loads of barbarians." I agree as to the barbarism, but differ as to the numbers of the Anglo-Saxons. Both these valuable works came into my hands after the coming of these sheets from the printers. See *per contra*, B. Thorpe, *Ancient Laws and Institutes of England*, preface, p. xxii.

[c] Gibbon, v. 351, ed. 1838, says, "If the *princes* of Britain relapsed into barbarism whilst *the cities* studiously preserved the laws and manners of Rome, the whole island must have been gradually divided by the distinction of two national parties. See also Pearson, *l.c.* pp. 99, 100; Coote's *Neglected Fact in English History*, pp. 144, 149, 169; Skene's *Four Ancient Books of Wales*; Gododin, *Poems*, p. 382, 394, 412; Broca, *Recherches sur l'Ethnologie de la France*, Mem. Soc. Anthrop. de Paris, tom. i. 1860; Sir William R. Wilde, *Beauties of the Boyne*, pp. 229, 232; Dr. Thurman, "On the two principal forms of Ancient British and Gaulish Skulls," *Memoirs of the Anthropological Society of London*, vol. i. *ibique citata*; Huxley, *Prehistoric Remains of Caithness*, pp. 114, *seqq.*

to harmonize the results of philological with those of craniographical inquiry, it may not be entirely hopeless to attempt to harmonise the traditions which tell us that the Romanised town populations, the "Lloegrians," took the side of the Saxons against their own countrymen, with the facts of our "finds" in cemeteries. Now, these facts, as they have presented themselves to me, I have, with the help of light borrowed from many other investigators, read thus. Two varieties of capacious crania, one dolichocephalic and the other brachycephalic, have been found by me in cemeteries referrible by their archæological characters to the periods corresponding with, and immediately subsequent to the close of the Roman domination in England. These two varieties of skulls are not ordinarily found occupying one and the same tumulus, at least with the relative positions which the remains of two races inhabiting the same district peacefully usually hold to each other, and I incline, though but doubtfully, to anticipate that evidence will be ultimately produced to identify the dolichocephali in question with the Lloegrian traitors, and the brachycephali with that portion of the Kymry which preferred exile to the Saxon yoke. The fact of the dolichocephali having been found abundantly (see p. 455, *supra*) in the Suffolk region of the Littus Saxonicum, where the Celt and Saxon are not known to have met as enemies when East Anglia became a kingdom, is not without its significance. Their geographical distribution may indicate a greater political pliability just as their greater variety of cranial conformation indicates a greater anatomical plasticity. In the same cemeteries with both of these varieties of skulls I have found skulls which are very closely similar to Professor Huxley's "River-bed" type of skull, and which I should be inclined to think may have belonged to a serf, or at all events to a poor, population, whose necessities may have made them as indifferent as any similar population is now to the political leanings of their masters. I should agree with Professor Huxley in considering this a very ancient form of cranium; but, though I should allow, with a knowledge of the great aptitude for modification possessed by the human cranium, that it may be connected by transitional forms with the dolichocephalic Celtic varieties,[a] I am convinced that it is even more closely allied with that brachycephalic form which has been called "Ligurian" by Professor Nicolucci, which is identified with the "Disentis" type of Professors His and Rütimeyer, by Dr. Holder in his excellent paper on the ethnography of Wurtemberg,[b] though the Swiss Professors themselves would demur to this

[a] As taught by Professor Huxley, *l.c.* p. 120; and *Proc. Soc. Antiq.* April 19, 1866.

[b] *Arch. für Anthrop.* bd. ii. hft. i. 55-57.

unification;[a] and which, finally, is, I apprehend, the form considered till recently[b] by nearly all continental anthropologists as the oldest of European types. I am inclined to hold that the rough-hewn brachycephalous Briton, of whom Dr. Thurnam has written in his paper on "the two principal forms of ancient British and Gaulish skulls,"[c] was distinct from the brachycephalous "Ligurian," though very possibly descended from one common stock; just as I should think it very probable that the cultured brachycephalous skulls of which I have spoken were produced simply by the operation of civilising influences upon the rougher crania of similar type, but of earlier times; and as I should suppose that Roman civilization and Roman inter-crossing elaborated the larger out of the smaller and earlier dolichocephalic skulls of this country. The five varieties which I believe may be thus distinguishable—viz., the two brachycephalous, and the two dolichocephalous, cultured and uncultured respectively, and the "Ligurian"—will be found to be connected with each other by inosculant forms. Even under conditions of the most primitive[d] simplicity and peacefulness, the human cranium shows a great tendency to variation; and in England we must recollect that this essential liability to variation was much intensified in early times by the migrations and immigrations of the Belgæ from the continent; by those of the pastoral inhabitants of the then thinly peopled, forest-covered country; and in later times by those of the Romans and Saxons. Most or all invasions entail more or less of intermarriage between the invaders and the invaded; and the craniographer who considers what very motley hordes passed into England under the names "Roman" and "Saxon" respectively, and for what long periods these immigrations continued to be made, will be cautious as to his inferences. Other disturbing conditions were introduced by the invasions specified: among them I need only mention the establishment of an antithesis between town and country life, which, in a country intersected by woods and ill-provided with roads, is equivalent to the establishment of an antithesis between civilization and savagery. Isolation, howsoever produced, whether by social, by political, or by physical barriers, tends to exaggerate the ethnical or tribal characteristics which intercross-

[a] See *Crania Helvetica*, p. 41; *Arch. für Anthropologie*, i. 70, 1866; Ecker, *Cran. Germ.* pp. 76-86; Huxley, *l.c.* pp. 117-118.

[b] For a discussion as to the priority in point of time of the brachycephalous or the dolichocephalous form of skull, see Mortillet, *Matériaux pour l'Histoire positive et Philosophique de l'Homme*, 1867, pp. 383-385; Ecker, *Crania German.* p. 93.

[c] *On two forms*, *l.c.* p. 31-44.

[d] See Bates, *Naturalist on the Amazons*, ii. p. 129, and *per contra*, Ecker, *Crania Germaniæ Meridionalis*, p. 2; Gratiolet, *Système Nerveux*, ii. 286.

ing tends to obliterate. But a subjective cause of much fallacy lies in the curiously corresponding psychological fact that one class of mind is as prone to overrate distinctions as another is to underrate differences.

In conclusion, I must be allowed to express my sense of the obligations I have incurred to Professor Phillips, whose advice and opinion I have very constantly sought; to Professor Pearson, whom I have consulted well nigh as frequently; to Heathcote Wyndham, Esq., M.A., Fellow of Merton College, who has given me assistance upon several chemical and mineralogical points which arose in the course of my investigations; to James Parker, Esq., for suggestions as to several archæological matters; and to Charles Robertson, Esq. for superintending these disinterments upon several occasions when I was unable to be present.

Catalogue of Frilford Excavations.

October and November, 1864.

I. SET.

Cranium A. Found with a fibula 2 ft. above it, wrongly described by me as a male skull in *Proc. Soc. Antiq.* 2 S. iii. 139. Probably an *Anglo-Saxon woman.* Middle-aged.

Cranium B. Found with a small Roman coin. Probably, from this and from anatomical characters, a *Romano-British woman.* Middle-aged. Elongated oval type.

Lower jaw from leaden coffin No. i. *Roman Man. C.* Middle-aged. In this leaden coffin a coin of Constantine the Great was found.

Calvarium E. Asymmetrical and with a partly open frontal suture. It is possible, though this calvarium came into my hands a month later than the lower jaw *C*, that it belonged to it. Mr. Akerman says (p. 3, *Proc. Soc. Ant. l.c.*) that the remains from the two coffins were handed over to me for examination.

Calvarium D. Incomplete. From a second leaden coffin. Middle-aged man. Capacious.

Fragments of second lower jaw, possibly belonging to calvarium *D.*

Jan. 25, 1867.

II. SET.

i. *Skull* of "Hohberg" type of His and Rütimeyer, with long and other bones, from a leaden coffin, in which were found five coins, one of which was of Constantine the younger, a second of Valens, and a third of Gratian, obiit A.D. 383. Femur 19½, humerus 13·9. Old man.

2 old men.
2 middle aged men.
2 middle aged women.
1 child.
—
7 bodies.

ii. *Skull* of "Sion" type of His and Rütimeyer, with long and other bones, from a leaden coffin, in which no coins were found. Clavicle and second left metatarsal broken and repaired during life.

iii. *Coins* (some of which were lost in sending by post), and leaden coffins.

iv. *Plain urn*, figured in Plate XXIV. fig. 4, which contained the bones of a child probably 2 to 3 years old.

III. SET.

April 16, *May* 9, 16, 1867.

i. *Skull of old man*, of "Sion" or globose Romano-British type. Skull circumference, 22¼ ins. Femur, 20¼ ins. Tibia, 15¼ ins. Height, 6 ft. 1 in.

ii. *Skull of young woman*, of "enlarged River-bed type," see p. 450, *supra*, with some osteophytic deposit internally, æt. 20 to 25. Humerus, 10·3 ins. Tibia, 11·7 ins. Stature, *circa* 4 ft. 6 in.

iii. *Lower jaw, and frontal bone, platycephalic*, said to have been found with umbo No. v. Old man.

iii[1]. *Second lower jaw*, also said to have been found with umbo. Very old man.

iv.

v. *Umbo*, reported to have been found with jaws iii. and iii.[1] but in the grave in which the umbo was reported to have been found a secondary interment was supposed to have taken place, a tibia and femur having been observed in it lying with their relative positions reversed.

vi. *Calvarium of young woman*, of "enlarged River-bed type," with cephalic index 77, and some leaning towards the smaller type on the one side, as well as to the globose Romano-British male skull vi. of Sept. 1867, on the other. It resembles skulls vi. of April 1, 1868, and xi. of same date, and very possibly may be the female form of the Romano-British globose type. It is mainly in length that these female skulls are inferior to the smaller male skulls of the "Sion" type. N.B.—8 millimètres is the average excess of male length. Femur, 13 ins. Humerus, 10 ins. Mean stature from these two bones, 4 ft. 2·5 ins. A phalanx of an ox and a piece of pottery were sent with this skull. This skull was found very near an infant's.

vi. *Child about time of birth.*

vii. *Skull of very old man*, of Romano-British elongated type. Humerus, 13·2 ins. Radius, 9·2 ins. Exostotic growths on humerus. Stature, 5 ft. 10 ins.

viii. *Skull of strong young man*, of Romano-British elongated type. No long bones.

viii[1]. *Skull of child*, first dentition, middle period of.

ix. *Bones of child*, first dentition, early period of.

ix. *Bones of child*, first dentition, early period of.

x. *Skeleton of young man* of globose Romano-British type, very similar to skull ix. of March 17, 1868. Found with fragments of Roman pottery. Femur, 17 ins. Humerus, 12·5 ins. Radius, 9·2 ins. Ulna, 10·1 ins. Stature, 5 ft. 4 ins. Some carious teeth.

xi. *Skull of young woman*, of Romano-British elongated type.

xi. *Skull of young woman, (?)* of Romano-British globose type.

xi. *Skull of young man* (?) Type (?).

xii. *Calvarium of young woman*, of Romano-British elongated type, with osteophyte internally. Much water-worn, teeth all good but one, which is carious.

xiii. *Skull and long bones of young Anglo-Saxon woman*, from a shallow 18-in. grave running from west by south to east by north, the deviation from orientation being 18° north. Two fibulæ, four or five beads, and the fragment of an urn figured Plate XXIV. fig. 1. Femur, 17 ins. Tibia, 14 ins. Stature, 5 ft. 4 ins. A piece of Anglo-Saxon and another of Roman pottery found in this grave, of small size.

4 old men.
6 young women.
1 infant.
3 children.
2 young men.
1 doubtful.

17 bodies.

III. SET.

xiv. *Skull of old man*, of "Hohberg" type, with the long bones. A large wound through skull, healed during life. Grave 3 ft. 6 in. deep, without relics, running in a direction from N.W. to S.E. Femur 20 in. long. Stature 6 ft. All the molars of upper jaw are lost. In the lower jaw the two anterior molars are left. Some teeth are carious; they are small in size. The grave was immediately on the right of that of the Anglo-Saxon woman xiii.

xv. *Skull of Romano-British woman*, with long bones, from a grave of same direction but not quite the same depth as the preceding—2 ft. 9 in. Femur, 16 in. Humerus, 11¾ in. Stature, 5 ft. A good instance, as is also xiii. of Sept. 26, 1868, xxiv. of Feb. 21, 1868, and cranium *A* of Oct. 1864, of the close adherence to type which female skulls, especially of the elongated Romano-British type, show.

xvi. *Skull of very old man*, $\frac{3}{10}$ inch thick, of elongated British type, with sagittal furrow posteriorly. No relics.

xvii. *Patterned cremation urn*, containing bones of child before period of second dentition. Fig. 3, Pl. XXIV.

xviii. *Plain urn*, containing the bones of a person about the period of puberty. Fig. 2, Pl. XXIV.

xix. *Skull of woman*, middle-aged, of elongated Romano-British type. Charred matter and pottery, and carious teeth from the grave. Femur, 16 in. Stature, 5 ft.

xx. *Bones of child* under 6 years.

xxi. *Skull of young person* with abnormal succession of teeth. Spongy growths in orbits and hypertrophic calvarium. Reported to have been found with two pieces of blackish pottery and a nail.

xxii. *Skull of young man*, of "Hohberg" type, wanting jaws. Femur, 18·3 in. Stature, 5 ft. 11 in. Sent with pieces of pseudo-Samian ware.

xxiii. *Skull of male*, of "Sion" type. Massive, weighty. Belonged to a man past middle period of life. Many teeth lost, both before and after death.

xxiv. *Skull of young person, probably woman.* Fragmentary, without history.

1 old woman.
3 old men.
1 old person, sex?
3 young women.
2 young persons, sex?
1 young man.
2 children.
1 Middle-aged woman.
—
14 bodies.

xxv. Ditto ditto. Teeth carious.

xxvi. *Lower jaw of old person*, with six teeth.

xxvii. *Bones of old woman*, Dec. 31, 1867. Elongated British type. Femur, 15 in. Stature, 4 ft. 8 in. Coffin hooping and nails found in grave.

xxvii². Fragments of an urn of Anglo-Saxon ware, said to have been found with a burnt bone, Dec. 31, 1867.

September 16, 17, 18, 1867.

IV. SET.

i. *Calvarium and bones of old woman* from a grave running from N.N.W. by N.W. to S.S.E. by S.E. 3 ft. 2 in. deep down to the coralline oolite. A burnt flint, some pseudo-Samian ware, and some gray lathe-turned pottery, were found in the grave with her. Femur, 16⅝ ins. Radius, 8½ ins. Stature, 5 ft. 1½ in. Of enlarged "River-bed" type. Lower jaw nearly destroyed by water-wear.

ii. *Similar calvarium from continuation of same trench.* "Cylindrocephalic" female skull. Stature, 5 ft. 4 ins. Femur, 17 ins.

iii. *Skull and long bones of young man of elongated British type*, from continuation of same trench.

A sheep's tooth close by his jaws, and two flints. Stature, 5 ft. 10 ins. Right fibula a good deal curved, epiphyses not fused. IV. SET.

iv. *Skull of young Anglo-Saxon*, found with spear, figured Plate XXIII. fig. 6, and umbo. The spear at right side of head with point upwards. This had been a secondary interment, the upper jaw of a very old man (iv[1].) having been found close to this skull, as also a manubrium sterni with articular facet for first left rib much enlarged, which could not have belonged to this skeleton. The grave was broader than the others, and had large stones set along its sides. Its direction was W.N.W. to E.S.E.

iv[1]. *Upper jaw of old person, probably male.* Sternum and large head of humerus and os calcis with it.

v. *Skull of very old man*, with skeleton, from continuation of trench whence the Anglo-Saxon No. iv. came. The direction of the grave the same, but no relics nor any stones set around it. Skull like iv. and xi. of March 17, and i. of March 23, 1868. A mixed form combining the Hohberg with the Sion type. Can these skulls have belonged to Christian Anglo-Saxons? See p. 448, *supra*. Femur, 18 ins. Stature, 5 ft. 8 ins.

vi. *Skull of old man* of "Sion" type found with skeleton at a depth of 15 inches below the patterned urn ix. figured in Plate XXIII. fig. 1, the urn occupying a space corresponding with the top of the sacrum of the skeleton below. Skull bones a little roughened by water-wear, but also strongly made, and indicating, as do the other bones also, both age and great strength by their various outstanding processes. Ceph. index, 78. Stature, 5 ft. 8 ins. Found with several pieces of flint and with pieces of pottery.

vii. *Skeleton of very old man*, of elongated Romano-British type. A typical skull such as No. 5709 in Royal College of Surgeons, which belonged to an "ancient aboriginal inhabitant of Scandinavia regarded as the Celt;" and called "dolichocephalic by the donor Professor Retzius." Found in a trench between the trench with skeleton No. vi. in it to the south, and the one with the Anglo-Saxon No. iv. in it to the north. Femur, 19¼ ins. Stature, 5 ft. 11 ins. Osseous up-growth of acetabulum, and hypertrophy of head of femur to correspond. Cephalic index, 72.

viii. *Young woman*, æt. 17 to 19, from trench in same direction, but to south of others, dug Sept. 1867, and to north of trench containing Romano-British woman, xv. of May, 1867. Found with flints and shards.

ix. *Urn* found above skeleton vi. figured in Plate XXIII. fig. 1, containing bones of child under 8.

x. Fragment of probably a *holy-water vessel*, figured in Plate XXIII. fig. 2.

About 4 ft. of ground had fallen in to the right of the pit, looking towards the River Ock.

2 old women.
1 young woman.
4 old men.
2 young men.
1 child.
—
10 bodies.

January 9, 1868.

i. *Child's bones*, between 9 and 10 æt. Many fragments of scoriform lava, probably Niedermennig, (Daubeny, *Volcanos*, p. 50); no other relics brought with it; compare Wylie, *Fairford Graves*, p. 24, and account of Anglo-Saxon woman, xxii. Jan. 6, 1869. (Cf. Schaafhausen, *Die Germanische Grabstätten am Rhein*, 1868, p. 122, and p. 25, *supra*.)

ii. and iii. *Young women* (20, 23) placed close, side by side, in the same trench. ii. a little shallower than iii. and a little further forward, and with the left humerus across the cervical region of iii. Roman pottery and nails. The legs of the two skeletons were wide apart. The iron

relics (nails) were found on the pelvis. No nails near the feet. Probably buried at same time; coffins in same trench.

iii[a]. *Delicate unpatterned urn* with child's bones, about 6 in. below the surface, and 18 in. above skull No. iv.; the place about a yard to the right of the place where the patterned urn of September 17, 1867, was found. Child's age towards the end of 5-6th year. See Plate XXIII. fig. 5.

iv. *Old woman's skull*, much senile atrophy, found 18 in. below urn iii[a]. with face upwards. No soil had fallen into the skull; one coin, the largest, was found on lower jaw; two smaller ones on atlas and axis, which are stained in consequence. Coins not identified. One nail was found on the right side of the head, but none on the right, nor at the feet. All the bones are very light. Humerus, 10 7·10 in. Femur, 14·5 in. gives stature 4 ft. 6 in.; humerus (say 11 in.) gives stature 4 ft. 10·6 in.; mean 4 ft. 8·3 in. skull small, cylindro-cephalic.

3 children.
3 women, 1 old.
2 young.
—
6 bodies.

v. *Skull of a child*, removed by the men. Close by was found a piece of lead, possibly from a leaden coffin, and with the bones an ulna, which had belonged to a very powerful man, which had been part of a fractured segment repaired during life. Compare account given p. 452, *supra*, of skeletons from leaden coffins. First dentition complete; second not begun.

January 15, 1868.

vi. *Strong urn*, not patterned, containing child's bones. Removed by men from earth a little to right of No. i. of Jan. 9. Aged probably about 9-10. Premolars not displaced; milk molars.

vii. *Child's bones*, a little to right of urn vi. Early period of first dentition.

viii. *Child's bones* under 6, at extreme left of "fall," *i.e.* of mass of earth thrown down in quarrying operations. Removed by men.

ix. *Young man*, with nails and Roman pottery, nails at head and feet. Elongated British type.

x. *Child*, much decayed. Early period of first dentition.

xi. *Calvarium, man*, middle age, with pot and flint. Long bones much water-worn. Elongated British type. No lower nor upper jaw.

xii. *Old man*. Face upwards, and left arm across body. About middle of "fall" and to right of viii. and xi. Elongated British type, but vertically carinate like the preceding specimen. The crossing of the arms may point to his being an Anglo-Saxon. See xxii., Jan. 6, 1869.

4 children.
1 young man.
1 middle-aged man.
1 old man.
2 old women.
—
9 bodies.

xiii. *Old woman*. Calvaria and femora, 16·7 in. Osteophytes and pacchionian pits. Waterworn. "Sion" type. Compare vi. of April 1, 1868; xi. of April 1, 1868; vi. of May, 1867.

xiv. *Old woman*. Skeleton sent by carrier. Right humerus, 11·7; left, 11·2. Femur, 13·4. Anglo-Saxon woman.

January 20, 1868.

xv. *Knife*, with much rust and (?) woody fibre adhering to it. Found close to xii. in the loose earth which had fallen to the bottom of the pit. Could this knife have belonged to the little old woman, xiv.? see skull, which is much more like that of the Anglo-Saxon woman xiii. of May, 1867.

xvi. *Urn*, a little to the left of the knee of xiii. of January 15. *The urn unopened.*

xvii. *Skeleton of woman (young)*. Her tibiæ were 1 ft. beneath the humerus of an Anglo-Saxon, xviii., who was lying in a direction from S. S.S.W. to N. N.N.W. and at right angles to

her grave, which was in the ordinary Romano-British direction from W.N.W. to E.S.E. In the intersection of the graves a beautiful coin of Constans was found. Left radius injured during life and repaired. Both humeri malformed. With this came part of upper jaw of old person, with three teeth from canines inclusive backwards, of elongated Romano-British type. Stature, 4 ft. 11 in.

1 young woman.
1 age and sex uncertain.
—
2 bodies.

February 8, 1868.

xviii. *Anglo-Saxon young man*, with umbo, spear, knife (no buckle), Roman tiles, stones round grave; coin of Constans in intersection of his grave with that of xvii.; some animal's (sheep?) bones in grave (see Akerman, *Pagan Saxondom*, introd. p. xvii.); grave from head S. S.S.W. to N. N.N.E.; foot at right angles to grave xvii. 2 ft. deep; xvii. 3 ft. A tooth of ox between head of Anglo-Saxon and feet of Romano-British woman. Femora only partially recovered, a large stone over their lower ends having crushed them very much. Fragments of great size. Clavicles long and curved. Humerus, 13·1; radius, 9·3. For Roman tilings, see *Archiv für Anthropologie*, i. 3, 356; (See xxii. of Jan. 6, 1869).

xix. *Man, strong, beyond middle of life, probably.* Head of River-bed type, parietal protuberance. Ribs broken and repaired in life; abscess at root of one molar. A good deal of exostosis on left humerus. Copper staining on jaw, and clavicle. No nails found with body. Romano-British direction of grave. See page 458, *supra*.

xx. *Skull of middle-aged man*, with Roman tile. Very elongated, with long bones. Bones loose. Skull peculiarly elongated.

xxi. *Skull of young man*, found with vertebra of ruminant in grave, and a fragment of pottery. Diseased hip. This cranium has some approximation to the modern form of English crania, and resembles herein crania No. v. of Sept. 1867, cranium xi. and iv. of March 17, and cranium No. i. of March 23, 1868.

2 young men.
1 aged.
1 middle-aged.
—
4 bodies.

February 21, 1868.

xxii. *Old Romano-British man*, large skull with long bones. Copper stain on left ulna, immediately to N.E. of grave of xviii. so that the Roman tiles found in taking out the skeleton were supposed to belong to this skeleton. A good deal of charcoal and decayed wood was found near the head, but not near the legs nor pelvis. Of elongated type. Femur, 18·4; ulna, 10·3. The man, however, who took out the tiles supposed them to belong to Anglo-Saxon No. xviii. In the cases described by Wanner (*Das Alemannische Todtenfeld bei Schleitheim*, 1867, p. 13, 16; *Archiv für Anthrop.* ii. 3, p. 356), Roman tiling was similarly employed. In some cases the graves were, as here, so close as to have only a single tile as a wall between them. See xxii. of Jan. 6, 1869.

xxiii. *Old woman* (? old man). Skull and long bones. Femur, 17; humerus, 12·2; radius, 8·9; ulna, 9·5; stature, 5·4. This is a very old skeleton, and I think the sex may be doubtful, but it is probably, from lower jaw's muscular markings, a male. The forehead is vertical, but perhaps abnormally; the vertex is carinate. Globose type.

xxiv. *Skull of old woman*, with five coins; one of Valens, and one of Constans I. Flint, ball-shaped, chipped. Flat flint and Roman pottery. Femur, 15·6; tibia, 12·4; radius, 8·4. Lower jaw nearly destroyed by water-wear. Elongated type.

xxv. *Man*, prime of life. Frontal suture patent.

1 child, 1st dent. complete.
1 infant.
2 men, prime of life.
2 old men.
1 old woman.
1 old, doubtful of which sex, prob. male.
1 young person, 18-20.
—
9 bodies, counting xxvi. as two.

xxvi. *Fragmentary cranium of old person;* bones of young person of eighteen to twenty wrongly assigned to it.

xxvii. *Long calvarium*, man prime of life. Lower jaw a good deal water-worn, and the long bones lost, perhaps destroyed by decay.

xxviii. *Infant.*

xxix. *Child*, first dentition complete.

March 4, 1868.

1 adult woman.

i. *Skeleton of Romano-British woman*, adult, of globose type, like No. xi. of April 1, 1868. Skull larger and more strongly made than most female skulls, and a nearer approximation to male skulls of same type. Teeth considerably worn; no wisdom teeth developed. Orthognathous, with posterior sagittal furrow. Femur, 16·2; tibia, 13·4; humerus, 11·2; stature, 5 ft. 8·10 in.

March 17, 1868.

i. *Skull*, with long bones and patellæ, of a *very strong young man*, buried with fragments of Roman pottery, black and red, and nail, with wood adhering to it, from coffin. Femur, 18·5; humerus, 13·3. Skull, flat and broad, to be reconstructed. Hyoid fully ossified. Elongated type.

ii. *Skull of old man*, with femur, and tibiæ, and nails near head. Of elongated, flat type. Large. Very large bones. Femur, 18·9.

iii. *Skull of young woman*, with long leg-bones and patellæ; short stature; teeth carious; and abscess in alveolar processes. Elongated type. Lower jaw all but destroyed by water-wear.

iv. *Skull of adult man.* No femora; no lower jaw; carious teeth. Skull high and long, but not delicate, though possessing transverse post-coronal depression. (Compare skull v. of Sept. 1867, and skull i. March 23, 1868.) No femora were found with it; the skeleton having been thrown down in a "fall" during the quarrying operations.

v. *Skull of young Anglo-Saxon woman*, very much contorted and distorted by post-mortem pressure, found in a grave 2 ft. 4 in. deep, with six beads, some near head, some over chest, perforated, of various sizes, of blue spongy glass, striated concentrically; fibula on either shoulder of flat shape, circumference gimped, and immediately within a circle of stamped round depressions, diameter, 1·3, of m ıch the same pattern, but not quite, nor of quite same weight as another fibula of uncertain date and place from this cemetery; of quite different pattern from the two other sorts of fibulæ found here, though of same general shape, flat, as fibulæ of xiii. May, 1867. A skewer-shaped bronze pin, 4 in. on the left breast; a knife, 3 in. long, near the waist. For pin fastening shroud, see *Pagan Saxondom*, p. 71, pl. xxxv. fig. 5; *Archæologia*, xxxv. 477. The direction of the grave was not quite that of the Romano-British, viz. W.N.W. to E.S.E. but was very nearly this, running, as it did, from a little to the north of W.N.W. to a little to the south of E.S.E. There was some Roman pottery in the grave, animals' bones, an ox tooth, an oyster-shell, and a flint. The skull and the other bones are much water-worn. But we can see that the skull is small and short, that the nasals rose from a level with the glabella, which was little prominent, though underlaid, as also the similarly low superciliary ridges, by sinuses. The parietal tubera are fairly marked, the minimum frontal diameter apparently very small, 3·7 in. though it may have

been diminished by compression, the same minimum frontal being 3·9 in. in each of the two other Anglo-Saxon women from Frilford. The interior of the skull has the smooth polished appearance characteristic of youth. The wisdom-tooth in the right half of the lower jaw is very small, and not at all worn. The premolars are also little used comparatively to the two true molars, though more than the third molar. The chin seems to have been emarginated unusually below, but to have been fairly pronounced. The upper jaw, judging from a small portion of the right side, must have been slightly prognathous. None of the teeth are carious. There is copper staining on some of the ribs, the clavicle of the left, and the humerus of the right side.

vi. *Patterned urn.* Probably a holy-water vessel, with characteristic bosses. Found a little to the south of the grave of Anglo-Saxon woman No. v. It was about 4 in. from the surface of the ground with its top edge, which had escaped the plough; its bottom was about 6½ in. Close to this urn or holy-water vessel was a mass of *infant skull bones*, the child having been about (before or after) the time of natural birth. It is possible that the diggers of the Anglo-Saxon woman's grave may have disturbed this urn in digging the grave, and having broken the urn may have reinterred it in fragments, and its contents apart from the fragments. A plain fragment, which does not appear to have belonged to the patterned fragment, was also found at some little distance from the patterned urn and the baby bones. And it is again possible that the child may have been deposited in the urn of which this latter fragment was a part. But I incline to think this was not the case, as the child's bones do not bear marks of fire; and though the Roman rule expressed in the words "minor igne rogi" (*Juv.* 15, 149; *Plin.* vii. 16) may not apply to an Anglo-Saxon interment, these bones may have belonged to a still-born child, for which no urn would probably have been used.

vii. *Skull and some long bones, imperfect, of young woman*, wisdom teeth not through. A piece of grey spongy pottery; no other relics. Romano-British direction, W.N.W. to E.S.E.

vii². *Skull and long bones of child* of 8 years, with two pieces of Roman pottery.

viii. *Skull and some long bones of old man.* Skull both globose and elongated. Humerus roughened at point of origin and insertion of muscles.

ix. *Skull and long bones of old woman* (? very old man), with Roman pottery. Skull of type of x. May, 1867. Femur, 16·3; tibia, 13·2; humerus, 11·4; stature, 5 ft. 1 in. It is doubtful, I think, whether this skull may not be a very old man's. The lower jaw shows great marks of old age. The straight clavicles point the other way. Of "Sion" type.

x. *Skull with long bones, of young woman*, possibly Christian Anglo-Saxon. This skull was sent by the men, but without relics. The type seems to be that of Anglo-Saxon woman xiii. May, 1867, and of woman, 771 m. Oxford University Museum (see p. 447, *supra*), from Helmingham. The wisdom teeth are, though little worn, very small in upper jaw. The jaw prognathic. Some little doubt as to sex from slope of forehead and parietes and large mastoids, but, nearly certainly, female. Femur, 15 in.; stature, 4 ft. 8 in. (1·51) by 4=56; tibia, 11·5; fibula, 11·2; ulna, 8·3; radius, 7·5; humerus, 10·4. The cervical vertebræ, from 7th onwards, having been impacted into the interior periphery of the lower jaw, it is probable the head was raised when the body was buried, and hence that this may have been an Anglo-Saxon interment. With this skull compare skull 5712 D, Royal

1 infant.
1 child of 9
4 young women.
3 old men.
1 adult man.
2 young men.
—
12 skulls.

College of Surgeons, which belonged to an Anglo-Saxon woman from Brighthampton, and No. xiii. of Sept. 26, 1868, *infra*.

xi. ***Strong young man***, with long bones. Protuberance on right parietal. Buried with nail. Wisdom teeth either not coming or retarded. Second molars little worn. Compare skull ix. *supra* and vii. Sept. 1867. Taken out of grave by the workmen, as also No. x.

March 23, 1868.

i. *Young woman*, æt. 17-18, no relics. Buried in grave running W.N.W. to E.S.E. Good skull of modern well-developed European type. Ceph. Index, 78. Height, 5 ft. 4 ins. Humerus, 11·9 ins. Femur, 17 ins. Skull 7 ins. long, 5·4 ins. broad, circumference 19·6 ins. Compare skulls vii. of Sept. 1867, and xi. and iv. of March 17, 1868, for somewhat similar conformation. Can these skulls have belonged to Christian Anglo-Saxons? See p. 448, *supra*.

ii. *Old woman*, skull and long bones. Romano-British direction. No relics. Sutures much obliterated. Exostoses in antrum maxillare. Extreme length of skull, 7 ins. The roots had reached into its interior. Vertical forehead. Elongated type. Femur, 15·5 ins.

ii^{a}. *Child*, with first permanent molar not through, at a short distance from ii.; a fragment of pottery, Romano-British, with it.

iii. *Skull of strong adult man*, with no long bones. Of broad platycephalic type. Teeth small, considerably worn, one carious. A nail found with bones. The skull was full of the small mollusc, *Achatina acicula*.

1 young woman.
1 old woman.
1 child.
2 adult men.
—
5 skulls.

iv. *Skull with long bones, very perfect, of very strong adult man*, found with Roman tile and Romano-British pottery. Femur, 18·8 ins. Humerus, 13·8 ins. Radius, 9·9 ins. Ulna, 11 ins. 5 ft. 11 ins. stature. Of globose type.

April 1, 1868.

i. *Young Anglo-Saxon man*, lying with head at N.N.E. and foot at S.S.W. the very reverse of the compass-points held by the head and foot respectively of Anglo-Saxon xviii. of Feb. 8, 1868, and of Anglo-Saxon women of May, 1867. The body was thrown down in the "fall" of the quarry, and was described as "not being in a grave, but lying above and at right angles to the other graves." There was a buckle 1⅛ in. long on the pelvis, (cf. *Pagan Saxondom*, p. 58, *Tombeau de Childeric*, p. 234,) and adhering to it some coarse flax fabric, as proved by the microscope. This skeleton has the left radius and ulna bronze-stained, and in the neighbourhood into which the bones were thrown a spear-head with a central raised ridge, like the assagaye of the Hottentots, *Pagan Saxondom*, p. 10, an umbo and a knife were found. These latter the workmen thought belonged to a child, i^{a}. which occupied a grave in the ordinary Romano-British bearing, but it is much more probable that they belonged to this skeleton, which had an Anglo-Saxon buckle upon its pelvis, and from which, in the wrench and jerk of the fall, the umbo and knife may very readily have been dislocated. The diameter of the umbo was 6·2 ins., height 2·8 ins., lesser circumference 14·4 ins. There were four broad-headed rivets on the broad periphery, with three eyelet-holes between each pair. Its type was therefore the ordinary one found here. This umbo was exchanged for one in the possession of the Aldworth family. The skull appears after

reconstruction to have been of the platycephalic ovoidal Anglo-Saxon type. Cf. *Crania Britannica*, Plate XLVI. and plate added in description of Plate IX.

i.[a] *Child*, probably boy of about 12.

ii. *Skull of old woman*, with Anglo-Saxon ornaments, such as are described p. 70 of *Pagan Saxondom*, and figured Plate XXXV. fig. 4; and *Fairford Graves*, Plate IX. fig. 10; *Cran. Brit.* Plate XX. p. 5; and Brighthampton, *Archæolog.* XXXVII. No. i. 38; No. XVI. in Ashmolean Museum; and with fibulæ such as are figured at fig. i. in Plate XVIII. *Pagan Saxondom*, as found near Rugby. The body lay in a grave running from W.S.W. to E.N.E. not an unusual bearing for an Anglo-Saxon here. The grave was 27 ins. deep. Stains of green on left clavicle and right rib i., the pins on the ring having been on the left shoulder, and the fibulæ one on each shoulder. The fibulæ are similar, also, to the two figured by Mr. Akerman in the *Archæologia*, vol. XXXIX. Plate XI. figs. 8 and 9, as found at Long Wittenham.

iii. *Skull and femur and patella of old man*, dug out of a grave with Romano-British bearings, and from under an urn, iii[a]. containing burnt bones of an adult. A nail was found in the grave with this old man. Skull eminently globose. Femur, 18·8 ins. Stature, 5 ft. 11 ins. Lower jaw nearly destroyed by water-wear.

iii[a]. *Urn* not reconstructed, plain, containing *adult bones*. It had a flat stone on the top of it.

iii[b]. *Plain urn*, with two bosses each on opposite sides, not pushed out from the inside, but stuck on to the outside, containing burnt bones of *an adult*.

iv. *Man past middle-life*. Skull of globose type with some of long bones. In a very much deeper grave than usual, 40 in. deep, in usual Romano-British direction, from W.N.W. to E.S.E. Many nails in grave with the bones, with wood, probably oak, adherent. A fragment of old Roman pottery, the bottom of an urn, in grave. Femur, 18·18; tibia, 14·8. Stature, 5·11.

v. *Skull of child*, with two amber beads, 6½ years old. Came from last grave but one on right side, as did also the skeleton No. ix. which had a coin with it, and also osteophytes internally in skull.

vi. *Skull with a few broken long bones of old woman*, very like a modern Swiss skull, 768 B, in Oxford Museum, with a cephalic index of 82. The oblique dip away of the posterior half of the parietal makes its distinctive character from the Anglo-Saxon xiii. of May 1867, and the skull xiv. of Jan. 16, 1868. It is shorter and broader than the River-bed type, but its longitudinal arc has the same contour. Again, No. vi. of 1867, with cephalic index 79, resembles it very much, and by vi. of May 1867, we pass to vi. of Sept. 17, 1867, with cephalic index 78, and to the female skull or calvarium xi. April 1, 1868, xiii. Jan. 15, 1868.

vii. *A child's skull* removed by the men. First dentition only.

viii. *Young woman* 25 *to* 30, *skull and long bones*, found near child with two amber beads. Skull of Romano-British, elongated, coronally-constricted type. See *Crania Britannica*, Plate LVIII. Wisdom-teeth not through the gum, though the crista is anchylosed to the ilium.

ix. *Skull of woman* 25 to 30, found with a coin which is lost, and in last grave but one on right side, whence came the child with the two amber beads. Osteophytes on inner surface of skull. Femur, 16·5 in.; tibia, 13·6 in. Stature 5 ft. 2 in.

x. *Fragments of skull of old person, probably female*, no history; found in "fall" with fragments of Roman pottery; skull of platycephalic type with the posterior sagittal "rainure," supposed to characterize Celts and Scandinavians. See *Bull. Soc. Anthrop. de Paris*, 1863, p. 319; 1864, p. 283. Internally, in correspondence with this, is a very deep furrow for the longitudinal sinus; showing of course that the bottom of the two furrows outside and inside the skull corresponds to a line of arrested growth, and that the skull has grown out on either side

2 old men.
2 adults ♀ ♂
1 young man.
1 boy 12.
3 children.
4 old women.
2 young women.
—
15 bodies.

in lines of the parietal tubera, to fit itself to the growing brain. In other skulls, as for example, skull No. ii. of March 23, 1868, this parietal vallecula on the exterior corresponds with raised ridge along the line of the longitudinal sinus. See *Cambridge Journal of Anatomy and Physiology*, iii. 253, 1868.

xi. *Skull and long bones of old woman?* from extreme right of quarry; of globose Romano-British type, resembling skull No. vi. of Sept. 1867, and vi. of April 1, 1868, and vi. of April, 1867. Femur, 14·5 in. Stature, 4 ft. 6 in.

xii. *Child* with first set of teeth—removed by me, Romano-British direction of grave.

September 24, 1868.

i. Key of Roman type . .
ii. Stag's-horn hair pin . .
iii. Bronze ring . . .
iv. Two knives . . .
v. Spoon . . . .
vi. Coin-shaped Kimmeridge shale . . . .

The excavations on this day were carried on upon two patches of ground which Mr. Aldworth had observed to have stronger and greener corn growing upon them than was to be seen elsewhere. Great quantities of the bones of the domestic animals, exclusive of the horse but including the dog, were found, together with the articles specified and numbered. No human remains were observed however. These spots appear to have been the rubbish-pits of some house of a person of considerable wealth, an "eques." See Pearson, *History of England*, i. 45; and Coote, *Neglected Fact in English History*, pp. 40—45, *cit. in loco.*

vii. Coin. One of the many coins imitated from Roman originals in 5th and 6th centuries. Very common in England.

viii. Pottery of very many patterns and degrees of fineness, from very fair and fine Samian down to very coarse ware. Some of both bestudded interiorly with particles of silex; some with pattern very like that of the Anglo-Saxon urn. See Bruce, *Roman Wall*, p. 438; A. Corbet's *Uriconium*, p. 63.

September 25, 1868.

ix.[1] *Anglo-Saxon girl*, with two plain bronze fibulæ, in a grave from 18 in. to 24 in. deep, lying over Romano-British woman (v. of Sept. 26, *infra* p. 477). The skeleton's upper half ran from W.N.W. to E.S.E.; but the lower half of the body was twisted at an obtuse angle to the upper half, and lay from N.N.E. to S.S.E. This distortion probably accounts for the displacement of one of the fibulæ from the right shoulders on to the manubrium sterni. Towards the lower end of this grave a beautiful coin was found, Byzantine, 4th century. Decentius. Many bones brought of a child of 9 æt. For the view that men had only one fibula and women two, see L'Abbé Cochet, *Tombeau de Childeric*, ed. 2de. 1859, p. 228. Can this distorted position correspond to the "contraction from the hips" described by Canon Greenwell, at Kirby-under-Dale, *Times*, 1841?

x.[2] *Skeleton of a child*, 12 to 14 months, from a grave running from W.N.W. head to E.S.E. foot. The depth of skeleton was 23 in.

xi[3]. *Skeleton of child*, 6 to 7, found lying immediately above xii[4]. in a grave with bearings W. for head, E. for feet. There was a large stone at its head, and in the grave were three pieces of Roman pottery, one beautifully patterned, and a horse's tooth. First true molar just coming into place. Could this child have been a Christian Anglo-Saxon?

xii[4]. *Skeleton of adult male*, probably 25 to 30 æt. lying underneath preceding skeleton, head at W.N.W. feet at E.S.E. Femur, 19·2 ins. Humerus, 13·7 ins. Globose Romano-British type. Stature, 5 ft. 10 in.

September 26, 1868.

xiii[1]. *Skeleton of adult woman.* Femur, 16 in. Stature, 5 ft. In a grave running from W.N.W. by N.W. to E.S.E. by S.E. its depth being 35 in. to stone which was under the back of her head. The vertex of the head was horizontal, the frontal norma looking E.S.E. and the vertebræ of the neck being underneath the base of the skull. The head of the humerus was 2 in. from the skull. No relics nor traces of nails in this grave. Possibly a coffinless one. Elongated type. A number of shards were with this skeleton, but I think it may have been an Anglo-Saxon woman, such as No. x. of March 17, 1868.

xiv[2]. *Skeleton of young man.* Femur, 17·6. Stature, 5 ft. 4·4 in. The skull lay on its right side, in a grave running from W.N.W. to E.S E. of 36 in. deep, without pottery or nails. Elongated British type.

xv[3]. *Skeleton of old man.* Femur, 17·9. Stature, 5 ft. 7·6 in. From a grave running from W.N.W. to E.S.E. 32 in. to top of skull, which was lying on its right side, not raised. The lower jaw a little on one side, not, however, so much as the head. A stone 9 in. long, 5 in. across, and 3½ in. thick, was so close to the forehead as to render it difficult to think a coffin could have been present. Elongated British type. Very fine skull, nearly of same size as the largest skull of the Dinnington series. See *Cambridge Journal of Anatomy and Physiology*, vol. iii. p. 253, 1868.

xvi[4]. *Skeleton of old man.* Femur, 16·3 in. Stature, 5 ft. 1½ ins. From grave of same direction and depth as others; no nails, but some fragments of pottery and "marks of burnings." Elongated British type.

xvii[5]. *Skeleton of young woman*, enlarged River-bed type. Femur, 16·2 ins. Stature, 5 ft. $\frac{8}{10}$ in. From a grave running N.N.W. by N.W. at 36 in. deep, one foot deeper than the Anglo-Saxon girl's grave No. ix[1]. of Sept. 25, under which it ran. There was a large stone close to the forehead. The head was on its left side, looking slightly upwards. A large fragment of the rim of an urn was found between the left os innominatum and sacrum of this skeleton. A small nail was also found in this grave.

September 28, 1868.

xviii. *Skeleton*, reported by men by whom it was taken out as having been discovered in levelling the ground and smoothing the inequalities caused by the excavations of Friday and Saturday, Sept. 25 and 26, and as having been in a grave of same direction as, but of much less depth (viz. only 18·19 in.) than, the other graves. It was "lying with its face downwards, as also its leg bones; and was found with two pieces of iron, and also a knife. One of the pieces of iron reached from its right elbow to its shoulder; the other was between the hip bone and the bottom of the grave. The knife was underneath the frame, about the middle of the body. The piece by the arm was a long piece all joined in one." Probably buried when bearers drunk. A coin was sent with this skeleton. Not verified? Postumus? Young (? middle aged) Anglo-Saxon man of broader head type, many carious teeth, bones much water-worn. Femur, 17·8; 5 ft. 7·2 in. stature. Had received and repaired during life a severe injury on left frontal and both parietals.

xix. *Skull with one long bone*, the humerus considerably worn, the rest decayed or water-worn, as also the lower jaw. No relics nor iron. In a grave of same direction as preceding, and as Romano-British, but deeper. Of elongated Romano-British type. Old man.

xx *Child.* The long bones not brought, having been beneath the growing crop of turnips. First dentition in place.

xxi. *Bones of infant about time of birth*, taken out of a grave about 18 in. deep, and of ordinary direction, W.N.W. to E.S.E.

TABULAR VIEW OF RESULTS OF OSTEOLOGICAL INVESTIGATIONS.

I. *Table of Skulls and Skeletons illustrating the several Types and Nationalities.*

The Celtic or Romano-British cranium of the "Cimbric" type of Retzius is illustrated by

Male crania, with average stature of 12 skeletons, 5ft. 8·3in.

vii. May, 1867.
xvi. ————
iii. Sept. 1867.
vii. ————
ix. Jan. 15, 1868.
xi. ————
xii. ————
xx. Jan. 20, 1868.
xxi. Feb. 8, 1868.
xxii. ————
xxv. Feb. 21, 1868.
xxvii. ————
i. March 17, 1868.
ii. ———— ? A.S.
iv. ———— ? A.S.
v. Sept. 1867 ? A.S.
iii. March 23, 1868.
xx. Sept. 26, 1868.
xi. Mar. 17, 1868 ? A.S.
xix. Sept. 28, 1868.

Female crania with average stature of 9 skeletons, 4ft. 11·5in.

Cranium B. Oct. 1864.
xi. May, 1867.
xii. ————
xv. ————
xix. ————
xxvii. Dec. 31, 1867.
xvii. Jan. 20, 1868.
xxiv. Feb. 21, 1868.
iii. Mar 17, 1868.
i. Mar. 23, 1868, ? A.S.
ii. ————
viii. Apr. 1, 1868.
xiii. Sept. 26, 1868.

The globose Romano-British type, the "Sion typus" of His and Rütimeyer, is illustrated by

Male crania, with average stature of 11 skeletons, 5ft. 8·5in.

i. April, 1867.
x. May, 1867.
ii. Leaden coffin, 1867.
xxiii. May, 1867.
xxiii. Feb. 21, 1868.
iv. March 23, 1868.
xii. Sept. 25, 1868.
viii. March 17, 1868.
ix. March 14, 1868.
vi. Sept. 1867.
iii. April 1, 1868.

1 *Female cranium*, of size corresponding to male variety of globose type.

March 4, 1868.

8 *Female crania*, of smaller size, and of a type which may be called *the enlarged river-bed type*, with 7 skeletons averaging 4 ft. 9·5 inches, are represented by—

vi. April, 1867.
ii. April, 1867.
xi. April 1, 1868.
vi. April 1, 1868.
i. Sept. 1867.
xvii. Sept. 1868.
xiii. Jan. 15, 1868.
xi. May 1867.

One *male cranium* which belonged to a man of 6 feet may be looked upon as furnishing a *form transitional from* an enlarged river-bed type to the globose Romano-British form.

xix. Feb. 8, 1868.

2 *Female crania*, of a small size and a type which may be spoken of as the *cylindrocephalic river-bed type*, with a mean stature of 5 feet, are represented by —

ii. Sept. 1867.
iv. Jan. 1868.

Table I.—*continued.*

Of skulls, which, though not found in with, are, from other causes, conjectured to have belonged to *Anglo-Saxons.*	there are	3 *Male crania*	v. Sept. 1867. iv. March 17, 1868. xi. ———
		3 *Female crania*	x. March 17, 1868. xiv. Jan. 15, 1868. i. March 23, 1868.
Of Roman, or Romano-British, skulls of the "Hohberg" type and stature 5ft. 10·5in.	there are 3 *Male crania*		i. Leaden coffin, 1867. xiv. May, 1867. xxii. ———
Anglo-Saxons with relics . .	*Female crania*		A. Nov. 1864. xiii. May, 1867. v. March 17, 1867. ii. April 1, 1867. ix. Sept. 25, 1868.
	Male crania		xviii. Feb. 8, 1868. i. April 1, 1868. xviii. Sept. 28, 1868.
	Males—Bones imperfect .		v. May, 1867. iv. Sept. 1867.
	Child		v. April 1, 1868.

II. *Numerical Table.*

Men from Leaden coffins, in 1864 and 1867 . . .	Old men . 2 Middle-aged . 2			. . 4
Men of Hohberg type, besides one from leaden coffin, i. 1867	Old . . 1 Young . . 1			. . 2
Anglo-Saxons with relics or in urns . . .	Young or middle-aged men with relics . . .	4		. . 21
	Old man	1		
	Young women	2		
	Middle-aged	1		
	Old	1		
	Children	2		
	Adults in urns (one about puberty . . .	3		
	Urn unopened	1		
	Children in urns	5		
Skeletons supposed to have belonged to *Anglo-Saxons* though found without relics	Men . . .	Old . . 1 Middle-aged 1 Young . . 1	3	. . 6
	Women . . .	Old . . 1 Young . . 2	3	
Romano-Britons of elongated oval capacious type, called "Cimbric," by Retzius, *Ethnologische Schriften*, p. 108 . . .	Men . . .	Old . . . 11 Middle-aged . 3 Young . . 7	21	. . 32
	Women . .	Old . . 4 Middle-aged . 1 Young . . 6	11	

Romano-Britons of globose or "Sion" type, the male crania of great size occasionally, and the female in only one instance approaching the larger male crania in dimensions	Men	Old	7	10	21
		Middle-aged	2		
		Young	1		
	Women	Old	6	11	
		Middle-aged	1		
		Young	4		
Male skeleton of enlarged Ricer-bed type (Old)					1
Skeletons the type of which has not been determined, the bones having been too much injured by water-wear or otherwise	Men	Old	1	2	14
		Young	1		
	Women	Old	1	6	
		Young	5		
	Sex undetermined	Old	2	6	
		Young	4		
Children found without relics and in graves	Infants			4	23
	Within period of first dentition			14	
	From period of commencement of second dentition to that of puberty			5	
			Total		123

Of which 123 there are

- 30 children
- 25 old men
- 13 old women
- 19 young women
- 15 young men
- 8 middle-aged men
- 3 middle-aged women
- 2 old persons of undetermined sex
- 4 young persons of undetermined sex
- 3 adults from urns
- 1 urn unopened

Of which 123—
48 are men.
35 are women.

I. Coins.

FIXED POINTS FOR ARGUING AS TO DATE AND NATIONALITY OF THE SKELETONS FOUND AT FRILFORD.

In leaden coffin No. i. Jan. 1867, five coins, of which one was a coin of Constantine the younger, one a coin of Valens, one a coin of Gratian.

In the leaden coffin opened by J. Y. Akerman, Esq. F.S.A. Oct. 1864, and also in one of the graves opened by him at the same time, a coin of Constantine I. was found.

In the point where *graves* xvii. *and* xviii. of Jan. 20 and Feb. 8, 1868, intersected, a coin of Constans was found. Possibly accidentally fallen in.

With *skeleton* xxiv. of Feb. 21, 1868, an old woman, of the elongated oval Romano-British or Celtic type, five coins were found, of which one belonged to Valens, and another to Constans I.

With *skull* ix. of April 1, 1868, a coin was found, which is lost.

With *skeleton* iv. Jan. 9, 1868, of a very old woman, of small cylindrocephalic type, three coins were found, which could not be identified.

In the grave, but towards the lower end of it, whither it may have found its way accidentally, in which the Anglo-Saxon girl No. ix. of Sept. 25, 1868, a Byzantine, 4th century, Decentius.

In the Roman rubbish-heap, examined Sept. 24, 1868, a coin was found, one of the many imitated from Roman originals in 5th and 6th centuries. Very common in England.

With the skeleton No. xviii. of Sept. 28, 1868, a coin was sent, Postumus (?)

II. Relics.

Arms and ornaments.

Lower jaws iv. of April and May, 1867. Reported to have been found with an umbo No. v.

Skeleton No. xiii. of May, 1867. Anglo-Saxon woman. Was found with fibulæ and beads.

Skeleton No. v. of March 17, 1868. Anglo-Saxon woman. Was found with fibulæ, beads, and pin.

Skeleton No. ii. of April 1, 1868. Anglo-Saxon woman. Was found with fibulæ of Midland counties type, with scoops and pickers on ring, and with a knife. But see "Further Researches, Long Wittenham," *Archæologia*, xxxix. Pl. XI. p. 142.

Skeleton No. iv. of Sept. 1867. Anglo-Saxon man. Was found with an umbo and a spear head.

Skeleton No. xviii. of Feb. 8, 1868. Anglo-Saxon man. Was found with an umbo, a spear head, a knife, and some Roman tiles set round his grave.

Skeleton No. i. of April 1, 1868. Was found with an umbo, a spear head with a central raised ridge, a buckle, and a knife.

Skeleton No. v. of a *child*, April 1, 1868. Was found with two beads, not spherical, and therefore probably Anglo-Saxon.

Skeleton No. ix. of Sept. 25, 1868. Anglo-Saxon girl. Was found with two fibulæ. A coin was also found towards the lower end of her grave, but may have fallen or worked its way into the grave without any intention on the part of the burying persons. The coin was a fourth century Byzantine coin of Decentius.

Skeleton No. xviii. of Sept. 28, 1868. Anglo-Saxon man. Was found with the face downwards, and with two pieces of iron, probably remnants of a crushed umbo, a knife, and a coin, which was considered as probably of Postumus.

I. Urns.

i. Anglo-Saxon	*Plain urn*, iv. of Jan. 25, 1867, containing bones of a child, 2 to 3 years old.
	Patterned urn, xvii. of May, 1867, containing bones of child before second set of teeth.
1. Cremation	*Plain urn*, xviii. of May, 1867, containing bones of person before age of puberty.
	Patterned urn, ix. of Sept. 1867, containing bones of child under 8 years of age.

1. Cremation (*continued*)	*Plain urn*, iii[a]. of Jan. 9, 1868, containing bones of child from 5 to 6 years of age.
	Plain urn, vi. of Jan. 15, 1868, containing bones of child from 9 to 10 years of age.
	Plain urn, xvi. of Jan. 20, 1868, unopened.
	Plain urn, iii[a]. of April 1, 1868, containing bones of adult.
	Plain urn, with two bosses, iii[b]. of April 1, 1868, containing bones of adult.
	Fragments, with bones, were found Sept. 1867, and Dec. 31, 1867.
2. Holy Water Vessels(?)	Patterned vessel in British Museum, of date 1864.
	Patterned fragment, figured Plate i. found Sept. 1867.
	Patterned fragment, figured Plate ii. found March 17, 1868, No. vi.
ii. Roman	A Roman vessel was found perfect at bottom of one of the walls.
iv. Skeletons found under urns . . .	vi. of Sept. 1867, under urn No. ix.
	i[v]. of Jan 9, 1868, under urn No. iii[a]. of Jan. 8, 1868.
	iii. of April 1, 1868, under urn No. iii[a]. of April 1, 1868, not reconstructed.
v. Skeletons found under other skeletons, which are identifiable by their relics . .	xvii. of Jan. 20, 1868, was under Anglo-Saxon man, xviii. of Feb. 8.
	xvii. of Sept. 26, 1868, was under Anglo-Saxon girl, ix. of Sept. 25, 1868.

See also No. 3 (xxxvii.), of Jan. 20, 1869, found under Anglo-Saxon woman, xxxviii. with fibulæ, No. 2 (xxiii.) of Jan. 6, 1869, found under Anglo-Saxon woman, xxii. with fibulæ, both of which are in the Oxford University Museum, as also No. xii. 4 of September 25, 1868, p. 476, *supra*.

DESCRIPTION OF PLATES.

Plate XXIII.

Fig. 1. Urn found 15 inches above a Romano-British skeleton. It contained the burnt bones of a child under 8 years of age, and also some fragments of glass, but no other relics. A simple cruciform stamp, a stick with a blunt point, and a thumb, must have been employed for the ornamentation of this urn; the impressions which they have made are visible on the internal surface. Though the pattern of this urn resembles that of the urn figured Plate XXIV. fig. 3, in some general characters, it differs from it in many points of detail, and also in the larger matter of being prolonged below the most projecting zone of the urn's surface instead of being limited below by that line. The width of this urn at the top,

where its top turns out a little, as may be seen from the small part which has escaped the injuries of the plough, is 4½ inches; its greatest width at the line just spoken of is 7½. See *Catalogue*, Sept. 1867, No. ix.

Fig. 2. Fragment of vessel, probably a holy-water vessel, with the "characteristic Anglo-Saxon bumps" upon it. See *Horæ Ferales*, p. 230. At the base of each "bump," and between it and the encircling zones, a small boat-shaped depression exists.

Fig. 3. Patterned vessel, probably, like the preceding, a holy-water vessel. It was broken when found, and was only about 4 inches from the surface of the ground. Close to it were a mass of the skull bones of an infant about the time of birth, which, however, do not bear marks of fire. The vessel may have been disturbed to make room for the infant, or it may have been broken by the plough. See *Catalogue*, March 17, 1868, No. vi.

Fig. 4. Urn which contained the bones of a child of about 9-10 years of age. It is of strong construction, and shows "einen in der Ausbauchung des Gefässes scharf vorspringenden Rand," which Schaafhausen has (*Die Germanische Grabstätten am Rhein*, 1868, p. 133) spoken of as the commonest form of old Germanic as opposed to Roman pottery. See *Catalogue*, Jan. 15, 1868, No. vi.

Fig. 5. Urn of delicate fragile structure; when found, containing the bones of a child of from 5-6 years of age, and placed about 18 inches above the skeleton of a Romano-British woman buried with three coins. The place it occupied was about a yard to the right of that occupied by the urn (ix.; Sept. 1867) figured above at fig. 1. See *Catalogue*, Jan. 9, 1868, No iii[a].

Fig. 6. Spear-head, 5½ inches long, found with the skeleton of a young Anglo-Saxon man (iv.; Sept. 1867), on the right side of his head. An umbo was also found with the same body, which occupied a grave of the Romano-British direction and depth, with stones set along its sides. Remains of a previous interment were found in this grave. See pp. 420 and 434, *supra*.

Fig. 7. Spear-head found with skeleton of a young Anglo-Saxon man interred in a shallow grave above and at right angles to the other graves, with an umbo and a knife, and the buckle figured below. This spear-head contrasts with the one figured above not only by its greater size, 10$\frac{7}{10}$ inches, but also in possessing the central raised ridge which has been noticed in the Assagaye of the Hottentots (see *Pagan Saxondom*, p. x. introd.) and in the weapons of other races. See *Catalogue*, April 1, 1868, No. i.

Fig. 8. Buckle found upon the pelvis of the skeleton (i.; April 1, 1868) with which the spear-head figured above was found. This is the only buckle which has been found at Frilford during the period of my investigations; Mr. Akerman was more fortunate in this respect. For the distinctively Teutonic character of the buckle see L'Abbé Cochet, *Tombeau de Childéric*, p. 233, 1859. See also Akerman, *Pagan Saxondom*, p. 58. The length of this buckle is only 1⅛ inch.

Plate XXIV.

Fig. 1. Fragment of urn of coarse texture found lying over the left hip of an Anglo-Saxon woman, who was buried in a shallow grave, with fibulæ and beads (see *Catalogue*, May 16, 1867, No. xiii.), and whose skull is figured below at fig. 5. The height of this urn is 11 inches, and its girth, as calculated, would have been about 31. There were no calcined bones found in relation with it, but it is of the same texture as the urn figured next, fig. 2, and of the same shape as an urn found at Long Wittenham, see *Archæologia*, vol. xxxviii. Plate xx. fig. 4, both of which did contain such bones. Probably it had been replaced in the position in which it was found after having been displaced in the digging of the grave. See page 436, *ibique citata*.

Fig. 2. Coarse-textured urn found containing calcined bones of human subject at the age of puberty. Its heighth is 6 inches; its circumference 24¾. It has no pattern either within or without, but is blackened by the action of fire on both sides. See *Catalogue*, May, 1867, No. xviii.

Fig. 3. Urn found containing the bones of a child, in whom the first set of teeth had in all probability come into use, and showing a pattern similar to those ordinarily recognised as characteristic of Anglo-Saxon and other Teutonic funeral ware, whether cremation urns or holy-water vessels. For references to memoirs bearing upon this subject see p. 431, note [a]. *Catalogue*, April and May, 1867, No. xvii. The actual size of this urn and of the three which follow on this plate is 2⅔rds of that given here. Two multiradiate stamps and a simply pointed stick must have been employed for making the stamped patterns, besides, probably, a second stick for making the encircling scorings and the vandykes on this urn.

Fig. 4. Small urn of finer texture than the preceding, but like it in the absence of pattern. Its height is 4½ inches, and its girth 16 inches. It contained the bones of a child which are considerably comminuted, but which enable us to say that the child had attained its first set of teeth, and that it would not, consequently, have been considered even by the Romans as "minor igne rogi." See *Juvenal*, Sat. xv. 149; *Plin.* vii. 16. An urn of similar shape, but said to have been of very coarse earthenware, is figured by Mr. Wylie at fig. 2, Plate VII. of his *Fairford Graves*, as having contained the remains of a child. Another urn of the same type, and not very different in size, is figured p. 32 of the *Saxon Obsequies* by the Hon. R. C. Neville as having been found at Little Wilbraham, in Cambridgeshire. See *Catalogue*, Jan. 1867, No. iv.

Fig. 5. Skull of Anglo-Saxon woman (May, 1867, No. xiii.) found buried with fibulæ, perforated glass beads, the large fragment of a cremation urn, figured above (fig. 1), and some smaller fragments of Roman and of Saxon pottery. After making all allowances for the peculiarities characteristic of the female sex which this skull shows, such as the parieti-frontal and the parieti-occipital angulations, combined with general smoothness and absence of ridges, we are still able to say of it that it possesses tribal peculiarities which enable us to distinguish it, as also the other skulls found interred with the Anglo-Saxon insignia, from the skulls of the Romano-Britons. For the peculiarities of the female skull, see Ecker, *Archiv für Anthropologie*, i. 1, 81, 1866; Welcker, *Untersuchungen*, pp. 65 and 141, 1862.

Fig. 6. Rectangular piece of iron hooping which had, in all probability, served as the fastening of a coffin. A large nail has been driven through the upper end of the vertical bar. See Dr. Thurnam, quoted in the *Osteological Catalogue of the Museum of the London College of Surgeons*, vol. ii. p. 881, 5712. *Catalogue*, Dec. 31, 1867, No. xxvii.

Fig. 7. Lid of Roman coffin (see note p. 421, *supra*), which was simply placed upon the top of a rectangular oblong leaden coffin, the whole being inclosed in an outer casing of wood.

Fig. 8. Half of Roman coffin, crushed out of original shape, which was that of an oblong box of equal width at both ends and without any soldering. See p. 421, *et seqq. supra*. About $1\frac{1}{3}$ of actual size.

Plate XXV.

Fig. 1. Urn preserved in the Library of Queen's College, Oxford, and probably from Faversham in Kent. For evidence, see p. 432, note [a]. This urn has been figured here not only for the sake of comparison with the other urns, but mainly because but few Anglo-Saxon cremation urns have been found in Kent at all. The contour and the pattern are both alike, and equally distinctive of Teutonic funeral vases. For the pattern three different multiradiate stamps must have been employed as well as a simply pointed stick. As in the urn figured at 1, in Plate xix. the pattern reaches some way below the well-defined line which corresponds with the greatest diameter of the urn. For the rarity of Anglo-Saxon urns in Kent see *British Assoc. Report*, 1855, p. 146. *Inventorium Sepulchrale*, xv. xlvi. 184, 185. Wylie, *Archæologia*, 37.

Fig. 2. Plain urn of coarsish paste from Frilford (iii.[b]; April 1, 1868) found containing the bones of an adult. The boss on its exterior has no depression corresponding to it on the internal surface of the urn. See *Horæ Ferales*, Plate xxx. p. 222, and p. 475, *supra*.

Figures 3, 4, and 5, represent fragments of Roman lathe-turned pottery found in what had served as the rubbish pit of a Roman residence at Frilford. The patterns upon these fragments may have served as models for the Anglo-Saxons in making their ware by hand.

Figures 6 and 7. A pair of odd fibulæ found with the skeleton of an Anglo-Saxon woman, which was buried about a foot above another skeleton, which had in all probability, therefore, belonged to a Romano-Briton. The cruciform fibula, which has been supposed to be the common Midland County form, was found on the right, and the plain disc-shaped fibula on the left shoulder; stones had been set round the body, and a lump of Niedermennig lava was found at the feet of the skeleton. See p. 440, *supra*, and Akerman's *Pagan Saxondom*, p. 35, Plate xviii.; and *Collectanea Antiqua*, vi. Plate xxviii. p. 150, 1868, for figure of female skeleton similarly buried with odd fibulæ on the two shoulders.

APPENDIX.

On Antiquities from Prœneste.

June 6th, 1867. W. M. Wylie, Esq. F.S.A. Local Secretary for Hampshire, communicated the following note on some objects found in a bronze cist at Prœneste, figured (to a scale of $\frac{3}{4}$ linear) in Plate XXVI. :—

"Figures of a bird and a human foot, in wood, from Palestrina, the ancient Prœneste, in the country of the Sabine Æqui.

"They consist of two parts. The upper plays on a pivot, and, on being pushed aside, discloses a hollow in the lower, divided into small compartments. These contain the paints, small sponge, thread, and such like toilette requirements of the Prœnestine ladies. These little *étuis*, if we may so term them, are found of various forms, but generally of a similar internal arrangement. They occur, with many other little reliques, in those remarkable bronze cylindrical vessels known by the name of *cistæ mysticæ*. This mysticity, however, has been much abated since Padre Garrucci has shown, pretty conclusively, that they contained the usual equipments of a Sabine lady's bath. These cists are generally ornamented with outline engraving, representing historical or mythological events. Sometimes, as in the case of the two splendid examples in the Kircherian Museum and the Palazzo Barberini, such engravings are of the highest order of Greek art. The handles of the covers of these cists are mostly formed by human figures in various attitudes, and of a very inferior execution.

"The cists have a lining of some kind of pine-wood, which, probably owing to the bronze oxyde, is often found in perfect preservation. Up to 1867 some fifty-four of these vessels had been found. A number of them are in the Barberini library, together with the various reliques they contained. One of these is a large ivory comb, with a bas-relief carving representing Amorini at play. Padre Garrucci is not disposed to consider the cists Etruscan, for they do not occur in Etruria, and assigns their date to the fifth century of Rome.

On various Antiquities from Prœneste, Ostia, and Albano.

June 17, 1869. W. M. Wylie, Esq. F.S.A. Local Secretary for Hampshire, exhibited the drawings from which are taken the Plates XXVII. to XXXI. inclusive. Mr. Wylie thus described the various objects there figured :—

"Plate XXVII. Bronze breast-fibula from the ancient graves at Prœneste, which have been described by Padre Garrucci in *Archæologia*, xli. 187 *seqq.* To the pendent chains are attached sundry amuletic objects, one of these being a *bulla*. These *bullæ* are hollow, and their edges very



WOODEN OBJECTS FROM A BRONZE CIST FOUND AT PRAENESTE.

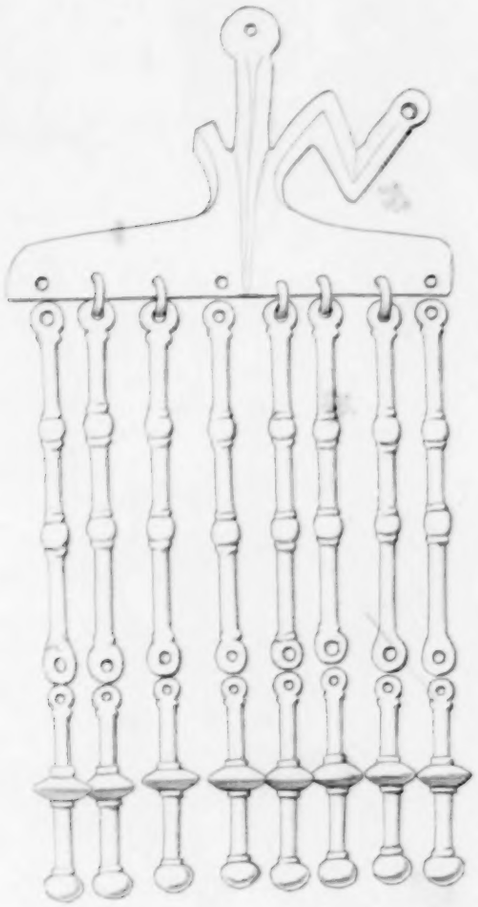
($\frac{1}{2}$ths size)

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BRONZE BREAST FIBULA FROM PRÆNESTE.
(full size)

Published by the Society of Antiquaries of London 1870.





BRONZE FIBULA FROM PRÆNESTE, AND LAMP FROM OSTIA.
(size $\frac{3}{4}$)

Published by the Society of Antiquaries of London, 1870.

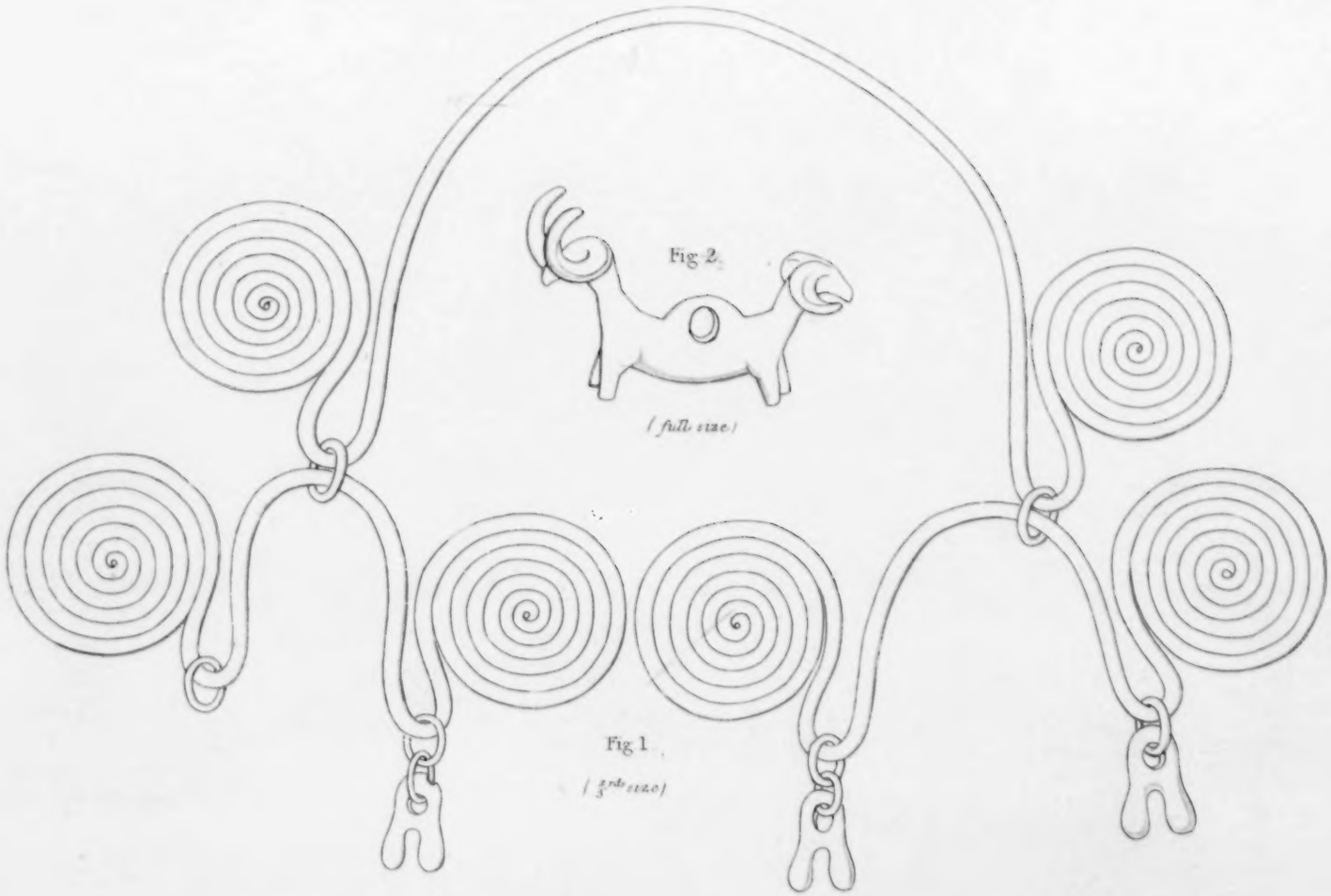


Fig 2.

(full size)

Fig 1.

($\frac{2}{3}$rds size)

BRONZE OBJECTS FROM PRAENESTE AND CERVETRI (AGYLLA).

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BRONZE HORSE-BITS FROM CERVETRI (AGYLLA) AND PRAENESTE.
(3/8 size.)

Published by the Society of Antiquaries of London, 1870.

Fig. 1.

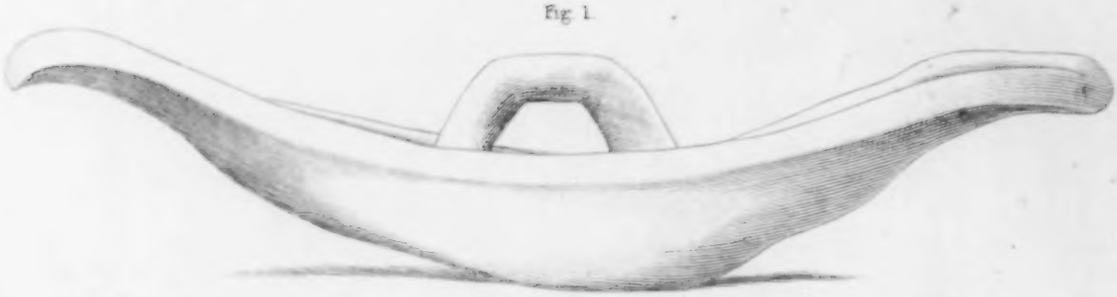
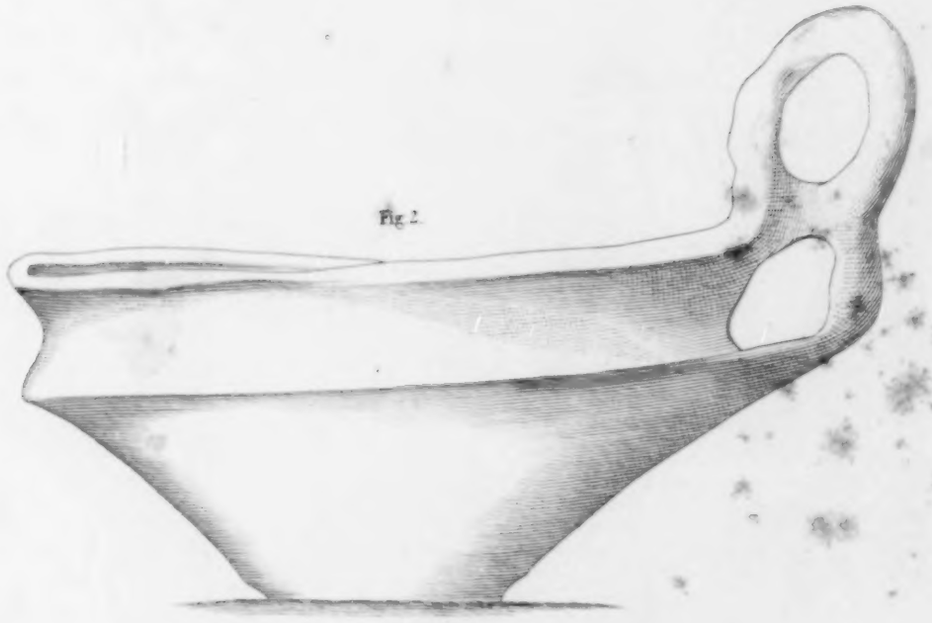


Fig. 3.



Fig. 2.



EARTHENWARE VESSEL AND LAMP; AND BRONZE KNIFE FROM ALBANO.

(full size)

Published by the Society of Antiquaries of London. 1870

carefully closed. One, opened by Padre Garrucci, was found to contain the withered stem of some plant—perhaps supposed to possess amuletic virtue.

"A similar pendent breast-ornament, but with *bullæ* only on the chains, is engraved in the *Annali del Instituto Archeologico di Roma*, 1854. It was found near the Rhine. Further opportunity for comparison will be found in Von Sacken's *Grabfeld von Hallstatt*, where many cognate pendents are figured. That in Plate xv. closely resembles the example found near the Rhine.

"Similar examples will also be found described in *Archæologia*, vol. xxxvii. and Lindenschmit, *Alterthümer*, Band. ii. They are all of the Italo-archaic class.—Size actual.

"Plate XXVIII. fig. 1. Another, but far less elaborate, breast-fibula from Præneste.

"*Ibid.* fig. 2. Bronze lamp, of solid construction, recently discovered at Porto, near the mouth of the Tiber, on the property of Prince Torlonia. It manifestly belongs to the archaic class. Attached to the handle is a small ring of lead.—Size $\frac{2}{3}$ linear.

"Plate XXIX. fig. 1. Bronze relique—apparently the ornamental head-gear of a horse. From the Prænestine graves.—Size $\frac{2}{3}$ linear.

"*Ibid.* fig. 2. Small bronze chimæra, formed by the heads of a bull and a ram at either extremity of the body. Compare *Archæologia*, vol. xxxvi. plate xxvi. fig. 15. From Cervetri (Agylla).—Full size.

"Plate XXX. Two bronze horse-bits from the ancient graves at Palestrina (Præneste) and Cervetri.—Size $\frac{2}{3}$ linear.

"These reliques also must be attributed to the archaic pre-Etruscan period. The cheek-pieces assume the swan-necked and the equine forms so characteristic of that early period of Italic art.[a]

"The objects in Plates XXVII.-XXX. inclusive, are, or were in 1869, in the collection of Signor Augusto Castellani, Rome, who most kindly allowed drawings to be taken for the purpose of engraving.

Plate XXXI.[b] Lamp (fig. 1) and vessel (fig. 2) of earthenware, baked rather than burned, both full size. These exist in the collection of L. Ceselli, the Roman palæontologist, and were found, together with others, and the bronze knife (fig. 3), in a small cist of *peperino*, at a spot somewhere below Albano. The cist further contained human ashes, and was lying between two beds of *peperino*, which would point to an ancient origin. The rather fine material of these vessels and the well-known type of the accompanying metal knife, however, forbid an attribution to any very remote civilization, though their period may have been pre-historic. The bed of *peperino* above this interment was certainly formed, according to Signor Ceselli's views, *after* its deposit. But the *peperino* proceeded from the great Latian volcano—the old Mons Albanus, now Monte Cavo—which is immediately adjacent. There is, perhaps, reason to suppose this volcano to have continued in activity to a very late period. At least Livy's repeated mention of such *prodigia* as strange sounds proceeding from the Alban mount, the showers of stones, and the irregular action of the waters of the lake, would point to the last throes of an expiring volcano.[c]

[a] See Von Sacken's *Grabfeld von Hallstatt* passim.

[b] For this plate the Society has to thank Mr. Wylie, who has caused it to be engraved at his own expense.

[c] See Pigorini and Lubbock, *Notes on Hut-urns*, &c. *Archæologia*, xlii. pp. 99-123; and see *Archæologia*, xxxviii. 189.

"The interment probably belonged to the old Umbrian population, who seem, in Rome at least, to be looked upon as the earliest inhabitants of the country. The vessels that accompany it hence appear to possess considerable interest from their resemblance to other archaic examples, in bronze, found in Germany and elsewhere, which are supposed to have an Italic origin. Two such will be found figured in Lindenschmit's Alterthümer.[a] One of these was discovered in Lüneburg, and the other in Hesse-Darmstadt. The British Museum possesses others from the exceedingly ancient Polledrara tombs at Vulci. The same collection also contains a lamp and vessel, in earthenware, very similar to the examples in our Plate, and from the same locality. It is not unreasonable to infer that this type was followed in the subsequent bronze manufacture, and that the vessels conveyed by commerce to the wilds of Germany also proceeded from the early civilization of an Umbrian *atelier*.

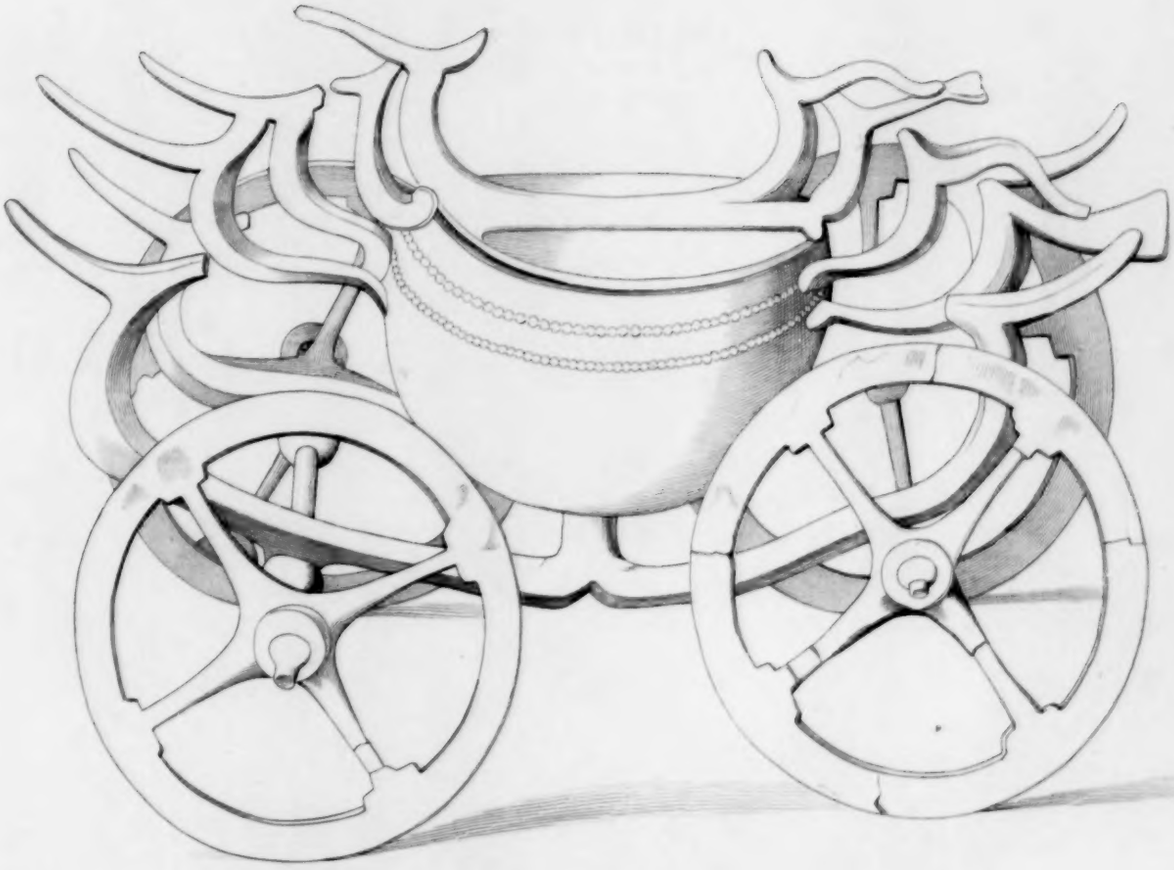
On an Archaic Bronze Car from Transylvania.

Feb. 4th, 1869. W. M. Wylie, Esq. F.S.A. Local Secretary for Hampshire, communicated a notice of an archaic bronze found in Transylvania, of which he exhibited a sketch. This object is now engraved full size in Plate XXXII. Mr. Wylie's remarks on this object are printed in the Proceedings (2 S. iv. 232). They are here repeated in substance :—

"In the Vienna museum is preserved one of those remarkable bronze wheeled vessels—waifs from a very remote antiquity—the certain origin and purpose of which still remain one of the mysteries of archæology. It was found in the province of Transylvania ; under what circumstances I know not. No record of its discovery appears to exist, except that it became the property of the museum in about the year 1832. The kindness of the Baron E. von Sacken has furnished me with the means of laying a full-sized sketch of this relique before the Society.

"It consists of a closed bowl, or cauldron, resting on a four-wheeled carriage. Some damage has occurred to one of the wheels, possibly from the pickaxe of the finder, but, with this exception, it is in perfectly good condition. It is of a somewhat light-coloured bronze, but, strange to say, the axles are of iron. The bowl, or rather cauldron, rests on a stout stem springing from the carriage, and on to this upright stem it is riveted—not soldered. The wheels are four-spoked, and by no means of the rude description so usual with this kind of relique. The spokes taper away downwards from the axles, and terminate in a kind of base, or step, on the fellies. The double carriage-frame terminates at either end in the head and neck of some aquatic bird, which is a very favourite form of the period. Similar forms project from the cauldron itself. There are twelve of these in all, and of such rude execution that the intention of the artist may rather be said to be designated than actually carried out. This is no uncommon circumstance in such archaic works, as is well known to the student. The torsed rods which form the frame-work of the bronze and

[a] Band ii. Heft 3, Taf. 5. Also compare Worsäae's *Afbildningen*, 218, Broncealderen ; and Madsen.



BRONZE CAR FOUND IN TRANSYLVANIA.

(full size)

Published by the Society of Antiquaries of London, 1870

iron andirons found in the great Regolino-Galassi tomb at Cære terminate just in the same way, in rudely designated swan's heads.[a] The double swan-head, without a body, also occurs as an ornamental design round the very remarkable bronze shields discovered in the tumulus of Klein-Glein in Styria, and now in the Gratz Museum.[b]

"This cauldron, with its car, certainly belongs to the same class of antiquities as the somewhat larger bowl and car found in 1843 in a tumulus at Peccatel in Mecklenburg, which are now in the Schwerin Museum.[c] The Peccatel bowl, however, has torsed handles, and those zones of pointed knobs so frequently seen in the more archaic examples of Italic art. Such are remarkably defined in the reliques of Vulci and Præneste, as also in the cognate vessels of Hallstatt.[d] Our car has considerable analogy with a wheeled object, snpporting bird-forms, found at Frankfort-on-Oder in 1851.[e]

"What may have been the purpose of this and other analogous reliques it is altogether impossible to decide, till we obtain very much further information. Such objects are exceedingly rare, and we can only surmise that they were in some way connected with the rites of some ancient faith, perhaps as *ex voto* offerings. Their small size would show them to have been purely symbolic of something more vast and magnificent, which the donor could not attain to. Such vast bronze or copper bowls, or cauldrons, appear to have been much coveted of old. Of this we have sufficient evidence in the accounts of the brazen vessels of Solomon's Temple; and of similar ones recorded by Herodotus, whether Lacedemonian, Scythic, or Samian.[f] If tradition will not suffice, we have positive ocular demonstration of the fashions of those days in the copper cauldrons from the archaic tombs of Præneste,[g] Cære,[h] and other places.

"Nor is it more easy to decide as to the country which furnished these reliques. Their extreme rarity, and the manner in which they are scattered, at such wide intervals, over so vast an extent of Europe, forbid our supposing them to have been a production of those lands where they were discovered. On the other hand, they have so many points of agreement with the antiquities of Central and Lower Italy as to induce a belief they are of old Italic origin. Italy, indeed, seems to have been at all periods the workshop of the arts, even in their earliest infancy. It is not then unjustifiable to suppose these, at present so inexplicable reliques, to have proceeded from the seat of European civilisation, and become diffused abroad by means of commerce."

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[a] Canina, *Etruria Marittima*, vol. i. tav. lix. fig. 6; Grifi, *Monumenti di Cære Antica*, tav. iv. fig. 5.

[b] *Mittheilungen des Hist. Vereins fur Steiermark.* 10tes Heft, pl. ii. Also on a shield figured in Worsäae's *Afbildningen*, 149, Broncealderen; and in Madsen.

[c] *Archæologia*, vol. xxxvi. pl. xxvi.

[d] Von Sacken, Grabfeld von Hallstatt.

[e] *Archæologia, loc. cit.*

[f] *Clio*, 70. *Thalia*, 43. *Melp.* 81.

[g] In *Archæologia*, vol. xli. cited from Barberini Collection.

[h] Canina, *Etruria Marittima.* Museo Gregoriano.

On an Archaic Bronze Car lately brought to light in Rome.

December 2nd, 1869. W. M. Wylie, Esq. F.S.A. Local Secretary for Hampshire, exhibited a tracing from a drawing of the car which is represented, full size, in the Plate XXXIII. For the copper-plate from which this engraving is printed the Society of Antiquaries is again indebted to the liberality of Mr. Wylie. The following is his brief account of the remarkable object in question:—

"The Plate represents an archaic bronze car which has lately appeared at Rome, and for a drawing of which we are indebted to the kindness of Padre Garrucci. No particulars of its discovery are obtainable, but it probably comes from Southern Italy.

"Though differing from all known examples of the class, it still presents a certain analogy with the very remarkable bronze car found at Judenburg, Styria, and now in the Gratz Museum.[a]

"Much of our car is evidently wanting, but the existing frame-work would seem to have once supported a platform, probably covered with symbolic figures, as in the case of the Judenburg car.

"Examples of these archaic bronze cars still continue rare. There can scarcely be a doubt as to their Italic origin, or that they are to be regarded as *ex voto* offerings of ancient cults, which found their way over Europe by the various channels of commerce which have at all times existed.

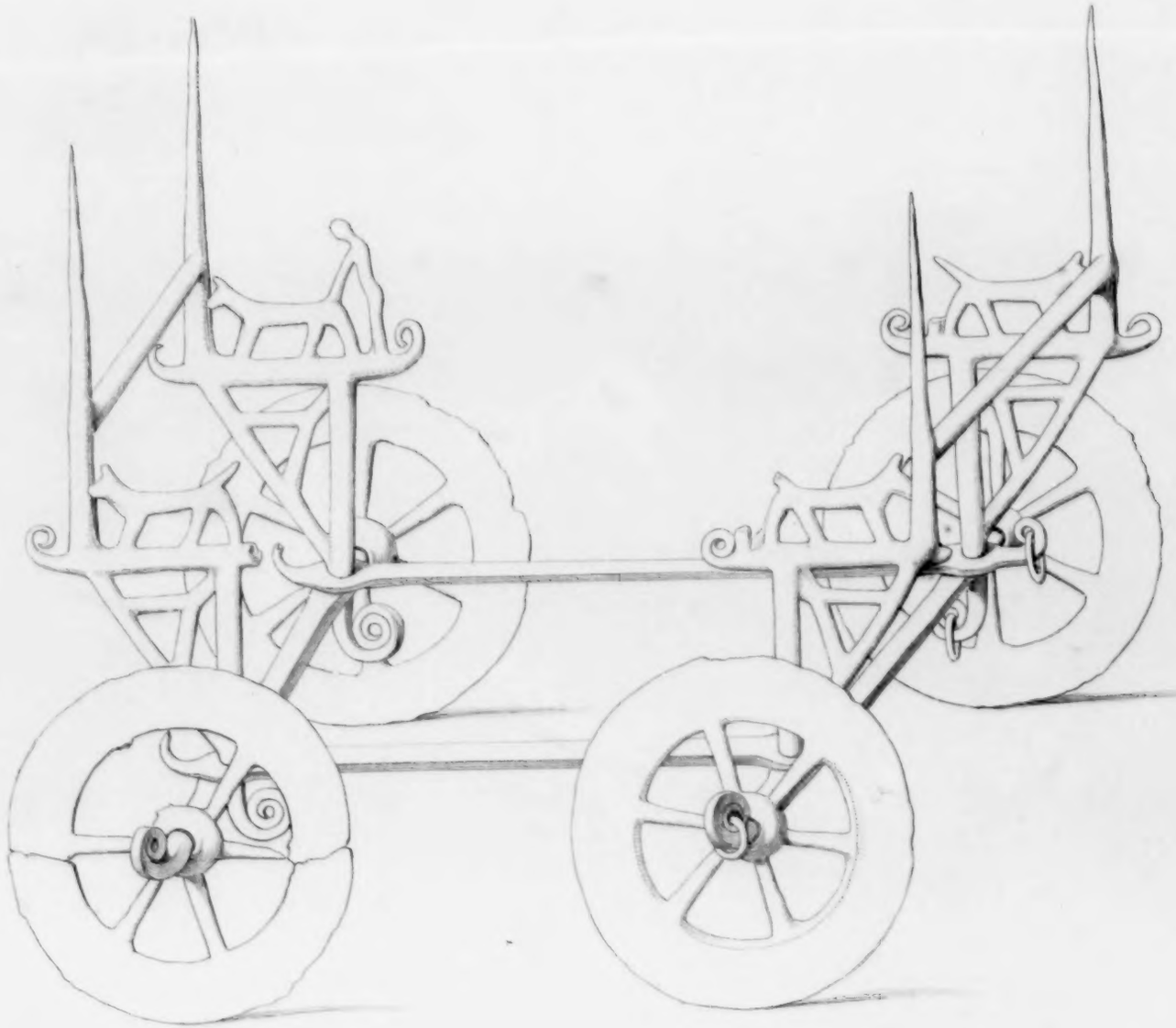
"It may be useful to recite such known examples as :—

I. The bowl, found at Peccatel, Mecklenburg, now in the Schwerin Museum.
II. The find at Frankfort-on-Oder.
III. The Judenburg car, now in the Gratz Museum.
IV. The find at Radkersburg, now at Schloss Freudenau, Styria.
V. The Lucera bronze from Southern Italy, now in the Ashmolean Museum.

"Representations of most of these, and of other analogous reliques, enrich the *Archæologia*, vol. xxxvi. plates xxvi. xxvii. and vol. xli."

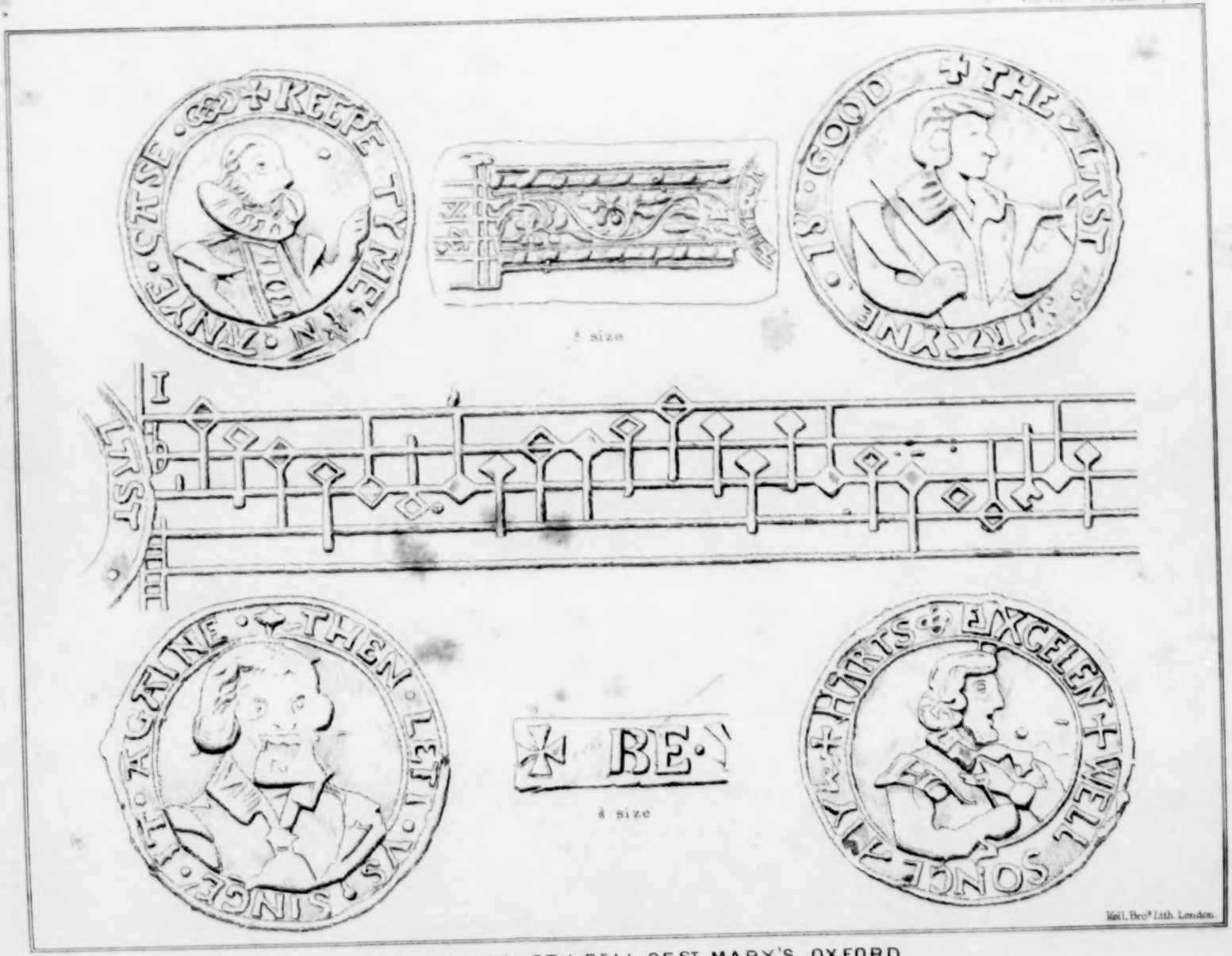
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[a] *Archæologia*, xxxvi. plate xxvi. fig. 5; *Mittheilungen des Hist. Vereins für Steiermark*, 3ᵗᵉˢ *Heft.*



ARCHAIC BRONZE CAR.
[full size]

Published by the Society of Antiquaries of London 1870



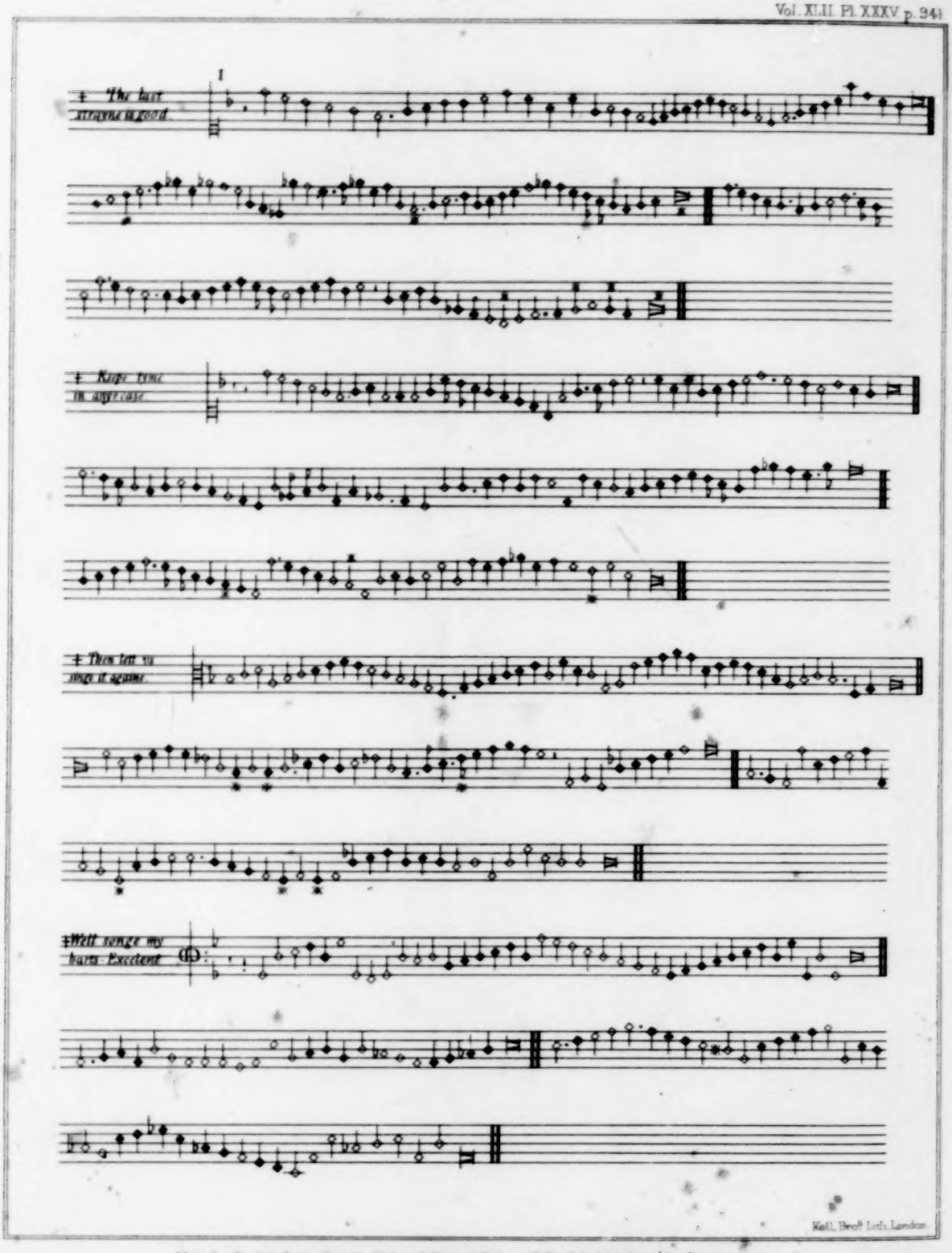
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Hall, Bro.s Lith. London.

FROM THE FOURTH BELL OF St MARY'S, OXFORD.

Published by the Society of Antiquaries of London, 1870.



Kell. Brot. Lith. London

MUSIC FROM THE FOURTH BELL OF St MARY'S, OXFORD

Published by the Society of Antiquaries of London, 1870.

A Musical Inscription on the fourth Bell at St. Mary's, Oxford.

Dec. 17th, 1868. The Rev. J. T. Fowler, F.S.A. communicated the following remarks on a Musical Inscription on the fourth bell at St. Mary's, Oxford :—

"On the 6th of June in last year I had the pleasure of exhibiting to the Society rubbings of a most curious Musical inscription on the fourth bell at St. Mary's, Oxford. A short notice of this exhibition is contained in the third vol. of the Society's Proceedings, p. 513, from which I quote the following description.

"Round the crown of the bell is the legend—

+ Be · yt · knowne · to · all · that · doth · me · see · that · Newcombe · of · Leicester · made · mee · 1612.

"The music comprises four detached pieces, looking like the parts of a harmonised composition. They are written in square notes on the five-line staff, each part headed by a distinct cleff, apparently the *Cantus*, *Medius* (possibly *Tenor*), *Altus*, and *Bassus*. Each division is preceded by a roundel, containing a man's profile and bust in relief, in the dress of the period, and encircled by a legend, as follows: — 1. + KEEPE · TYME · IN · ANYE · CASE. 2. THE · LAST · STRAYNE · WAS · GOOD. 3. THEN · LETT · VS · SINGE · IT · AGAINE. 4. EXCELENT · WELL · SONGE · MY · HARTS. Without a more accurate cast of this inscription, it would be almost impossible to score the music.

"Since these notes were made, I have obtained two casts of the inscription from different moulds and also another rubbing. By carefully collating these I have succeeded in making a transcript in the old notation, from which, with the kind and valuable assistance of Dr. Rimbault, I have made out the score copy which I now exhibit. The music is very quaint and beautiful in its way, in the style of the Elizabethan Madrigals. It may have been an exercise for *sol fa* practice or for the viols, well known to some of the societies of ringers at the time, and perhaps a "Fancy" if not a composition of Newcombe the bell-founder. Many of his class were sufficiently well skilled in prick-song to write in this style, as, for example, the father of Milton, who was a scrivener. Or it may have come from the donor or donors of the bell, about whom however nothing is known. The parish records have been searched in vain for anything relating to the casting of this bell. It has been suggested that the intention was for a party of musicians to perform the music standing round the bell; but this could not be while the bell was hung, at any rate, on account of the frame concealing a good deal of the notation.

"Dr. Rimbault found great difficulty in scoring some parts of the composition on account of the number of false dots, lines, &c. as it stands on the bell, but his knowledge of the part-writing of the sixteenth and seventeenth centuries has enabled him to produce an intelligible and no doubt a substantially correct version.

"My attention was directed to this bell some time ago by a notice of it in Lukis's 'Account of Church Bells,' in which is a plate representing half of the music, and only two of the roundels are mentioned. It may perhaps be interesting to some to know that the old 'Tom of Lincoln' was cast by this same celebrated founder in conjunction with Henry Holdfield of Nottingham two years previously, and that the same rhyming inscription is found on the fifth bell at St. Mary's,
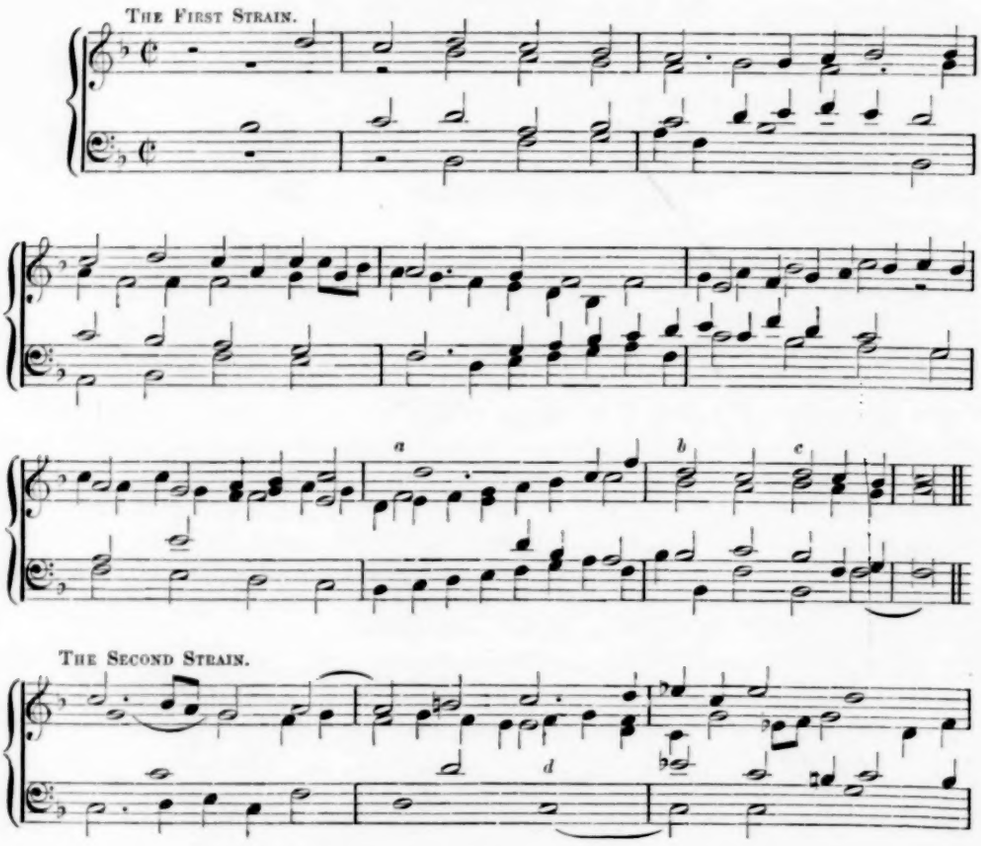
which was cast at the same time as the music bell, and also on many bells in various parts of the kingdom."

Plate XXXIV. represents in full size the four Roundels mentioned by Mr. Fowler as preceding the four parts of this curious musical composition, together with a portion of the music in facsimile.
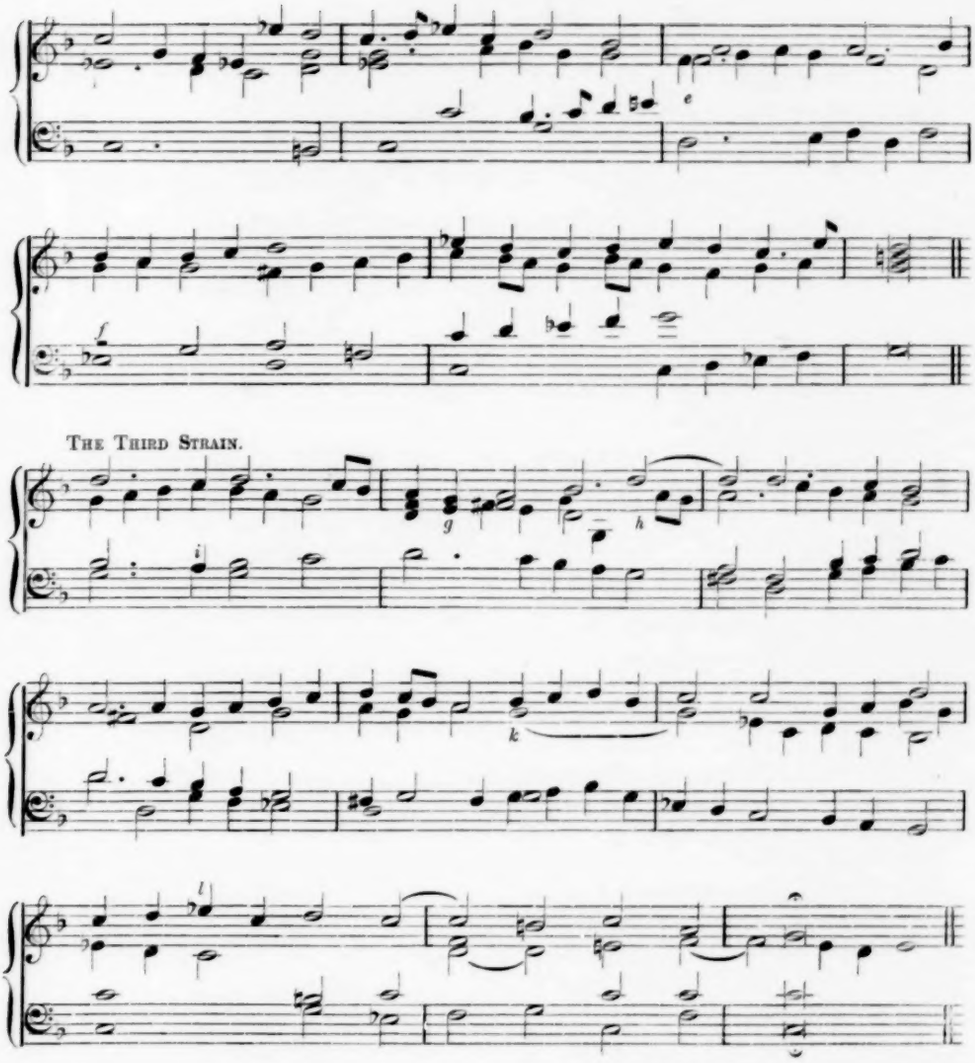
The whole of the music, as transcribed by Mr. Fowler and Dr. Rimbault, will be found in Plate XXXV.; the character of the notation being preserved as nearly as possible, though on a reduced scale.

The score in a compressed form and in modern notation is here subjoined:—

MUSIC FROM BELL AT OXFORD, IN SHORT SCORE.



a Defective in original.
b This note and the following not in the original.
c Semibreve in original.
d Defective in original.



e Very defective here in original.
f Minim in original.
g Minim in original.
h It has been necessary to lengthen this note.
i Minim in original.
k Defect in original here.
l Flat not in original.

NOTE.—A composition of this kind cannot conveniently be printed in short score so as to preserve throughout the distinction of the several parts. This may, however, be ascertained from the original notation in Plate XXXV.

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Memorandum. On Mr. Scharf's Notes on a Picture of the Children of Philip King of Castile (pp. 245—257),

By inadvertence, at p. 249, Mr. Wornum's publication of the Inventory of Royal Pictures in 1547 has been described as "without change or comment." Mr. Scharf wishes to correct this by stating that the learned editor has modernised the spelling, supplied punctuation, and added illustrative footnotes to the text. It was printed direct from the manuscript in the British Museum, quite independently of any other publication. The word "reprint," at p. 252, should consequently be altered to "edition."